

DRESS MAKING

NSQF LEVEL - 3

TRADE PRACTICAL

SECTOR: APPAREL

(As per revised syllabus July 2022 - 1200 Hrs)



Directorate General of Training

DIRECTORATE GENERAL OF TRAINING
MINISTRY OF SKILL DEVELOPMENT & ENTREPRENEURSHIP
GOVERNMENT OF INDIA



**NATIONAL INSTRUCTIONAL
MEDIA INSTITUTE, CHENNAI**

Post Box No. 3142, CTI Campus, Guindy, Chennai - 600 032

Sector : Apparel

Duration : 1 - Year

Trade : Dress Making - Trade Practical - NSQF Level - 3 (Revised 2022)

Developed & Published by



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FOREWORD

The Government of India has set an ambitious target of imparting skills to 30 crores people, one out of every four Indians, by 2020 to help them secure jobs as part of the National Skills Development Policy. Industrial Training Institutes (ITIs) play a vital role in this process especially in terms of providing skilled manpower. Keeping this in mind, and for providing the current industry relevant skill training to Trainees, ITI syllabus has been recently updated with the help of Media Development Committee members of various stakeholders viz. Industries, Entrepreneurs, Academicians and representatives from ITIs.

The National Instructional Media Institute (NIMI), Chennai, has now come up with instructional material to suit the revised curriculum for **Dress Making - Trade Practical - NSQF Level - 3 (Revised 2022)** in **Apparel Sector** under **Yearly Pattern**. The NSQF Level - 3 (Revised 2022) Trade Practical will help the trainees to get an international equivalency standard where their skill proficiency and competency will be duly recognized across the globe and this will also increase the scope of recognition of prior learning. NSQF Level - 3 (Revised 2022) trainees will also get the opportunities to promote life long learning and skill development. I have no doubt that with NSQF Level - 3 (Revised 2022) the trainers and trainees of ITIs, and all stakeholders will derive maximum benefits from these Instructional Media Packages IMPs and that NIMI's effort will go a long way in improving the quality of Vocational training in the country.

The Executive Director & Staff of NIMI and members of Media Development Committee deserve appreciation for their contribution in bringing out this publication.

Jai Hind

SHRI. ATUL KUMAR TIWARI., I.A.S.,

Secretary
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PREFACE

The National Instructional Media Institute (NIMI) was established in 1986 at Chennai by then Directorate General of Employment and Training (D.G.E & T), Ministry of Labour and Employment, (now under Directorate General of Training, Ministry of Skill Development and Entrepreneurship) Government of India, with technical assistance from the Govt. of Federal Republic of Germany. The prime objective of this Institute is to develop and provide instructional materials for various trades as per the prescribed syllabus under the Craftsman and Apprenticeship Training Schemes.

The instructional materials are created keeping in mind, the main objective of Vocational Training under NCVT/NAC in India, which is to help an individual to master skills to do a job. The instructional materials are generated in the form of Instructional Media Packages (IMPs). An IMP consists of Theory book, Practical book, Test and Assignment book, Instructor Guide, Audio Visual Aid (Wall charts and Transparencies) and other support materials.

The trade practical book consists of series of exercises to be completed by the trainees in the workshop. These exercises are designed to ensure that all the skills in the prescribed syllabus are covered. The trade theory book provides related theoretical knowledge required to enable the trainee to do a job. The test and assignments will enable the instructor to give assignments for the evaluation of the performance of a trainee. The wall charts and transparencies are unique, as they not only help the instructor to effectively present a topic but also help him to assess the trainee's understanding. The instructor guide enables the instructor to plan his schedule of instruction, plan the raw material requirements, day to day lessons and demonstrations.

IMPs also deals with the complex skills required to be developed for effective team work. Necessary care has also been taken to include important skill areas of allied trades as prescribed in the syllabus.

The availability of a complete Instructional Media Package in an institute helps both the trainer and management to impart effective training.

The IMPs are the outcome of collective efforts of the staff members of NIMI and the members of the Media Development Committees specially drawn from Public and Private sector industries, various training institutes under the Directorate General of Training (DGT), Government and Private ITIs.

NIMI would like to take this opportunity to convey sincere thanks to the Directors of Employment & Training of various State Governments, Training Departments of Industries both in the Public and Private sectors, Officers of DGT and DGT field institutes, proof readers, individual media developers and coordinators, but for whose active support NIMI would not have been able to bring out this materials.

Chennai - 600 032

EXECUTIVE DIRECTOR

ACKNOWLEDGEMENT

National Instructional Media Institute (NIMI) sincerely acknowledges with thanks for the co-operation and contribution extended by the following Media Developers and their sponsoring organisation to bring out this IMP **Trade Practical** for the trade of **Dress Making - NSQF Level - 3 (Revised 2022)** under **Apparel** Sector for Craftsman Training Scheme.

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NIMI records its appreciation of the Data Entry, CAD, DTP operators for their excellent and devoted services in the process of development of this instructional material.

NIMI also acknowledges with thanks, the invaluable efforts rendered by all other staff who have contributed for the development of this Instructional material.

NIMI is also grateful to all others who have directly or indirectly helped in developing this IMP.

INTRODUCTION

TRADE PRACTICAL

The trade practical manual is intended to be used in practical workshop. It consists of a series of practical exercises to be completed by the trainees during the course of the **Dress Making** trade supplemented and supported by instructions/ informations to assist in performing the exercises. These exercises are designed to ensure that all the skills in compliance with NSQF Level - 3 (Revised 2022) syllabus are covered.

The manual is divided into nine modules. The distribution of time for the practical in the nine modules are given below.

Module 1	-	Textile and hand work basic operations
Module 2	-	Basic Construction
Module 3	-	Garment Part Construction
Module 4	-	Garment Construction
Module 5	-	Measuring Drafting and Adaptation Technique
Module 6	-	Pattern Block Draping, Grading and Manipulation
Module 7	-	Garment Manufacturing Technique
Module 8	-	Grading and Coral Draw
Module 9	-	Quality Control & Marker Making

The skill training in the shop floor is planned through a series of partial exercises centered around some practical project. However, there are few instance where the individual exercise does not form a part of project.

While developing this practical manual a sincere effort was made to prepare each exercise which will be easy to understand and carryout even by below average trainee. However, the development team accept that there is a scope for further improvement. NIMI looks forward to the suggestions from the experienced training faculty for improving this manual.

TRADE THEORY

The manual of trade theory consists of theoretical information for the Course of the **Dress Making** Trade Theory - NSQF Level - 3 in **Apparel sector**. The contents are sequenced according to the practical exercise contained in NSQF LEVEL - 3 syllabus on Trade Theory attempt has been made to relate the theoretical aspects with the skill covered in each exercise to the extent possible. This correlation is maintained to help the trainees to develop the perceptive capabilities for performing the skills.

The trade theory has to be taught and learnt along with the corresponding exercise contained in the manual on trade practical. The indications about the corresponding practical exercises are given in every sheet of this manual.

It will be preferable to teach/learn trade theory connected to each exercise at least one class before performing the related skills in the shop floor. The trade theory is to be treated as an integrated part of each exercise.

The material is not for the purpose of self-learning and should be considered as supplementary to class room instruction.

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LEARNING / ASSESSABLE OUTCOME

On completion of this book you shall be able to

S.No.	Learning Outcome	Ref.Ex.No
1	Make hand stitches in the given fabric following safety precautions. (NOS:AMH/N1948)	1.1.01 - 1.1.16
2	Stitch the following using the given fabric: Seams with seam finishes, Darts, Pleats, Tucks, Gathers & Shirrs, Frill, Hem, Casing, Edge Finishing, Neck lines, Placket, Pocket, Collar, Sleeves, Cuff. (NOS:AMH/N1948)	1.2.17 - 1.3.27
3	Fix the fasteners on the given fabric. (NOS:AMH/N1948) Mend the given fabric. (NOS:AMH/N1949)	1.3.28 - 1.3.30
4	Draft a pattern for Ladies' Suit. (NOS:AMH/N1947) Sew a Ladies' Suit with the help of the given pattern. (NOS:AMH/N1947)	1.4.31
5	Sketch the following manually by applying suitable fabric designs- Indian Dresses & Western Dresses. (NOS:AMH/N1211)	1.5.32 - 1.5.34
6	Design the following with suitable fabric design using Corel draw software- Indian Dresses & Western Dresses.	1.5.35 - 1.5.36
7	Make the following Block Pattern set using different sizes taken from a size chart - Children's Block, Block for Teenager, Ladies Block, Gents Block. (NOS:AMH/N1105)	1.5.37 - 1.6.38
8	Make the Patterns for the following using Draping Techniques - Basic Bodice with Darts, Basic Bodice with Princess line, Basic Straight Skirt, Basic Circular Skirt. (NOS:AMH/N1105)	1.6.39
9	Construct the following garments with fitting and quality according to the sketched designs and blocks using adaptation/draping and manipulation techniques. - Dress for Children (Yoke Frock), Dress for Teenager, Ladies Dress, Ladies Suit, Ladies Night wear, Ladies Blouse, gents' Shirt, gents' trouser. (NOS:AMH/NO701)	1.6.40 - 1.7.44
10	Make patterns of the following by Pattern Grading techniques to their next higher or lower sizes using the size charts. (NOS:AMH/N1105)	1.7.45 - 1.8.49
11	Make markers on different width, texture & designs of the following- Frocks, Blouses, Shirts, Trousers. (NOS:AMH/NO201)	1.8.50 - 1.9.53

SYLLABUS FOR DRESS MAKING

Duration	Reference Learning Outcome	Professional Skill (Trade Practical) (With indicative hour)	Professional Knowledge (Trade Theory)
Professional Skill 102 Hrs.; Professional Knowledge 30 Hrs.	Make hand stitches in the given fabric following safety precautions. (NOS:AMH/N1948)	1 Familiarization with the Institute. (01 hrs.)	Introduction
		2 Practice of Hand stitches & Making Samples of them. (17hrs.)	<ul style="list-style-type: none"> • Trade • Job Prospects • Safety precautions • First Aid Hand stitches • Hand needles - Size & types • Sewing Thread • Types & Applications of hand stitches (06 hrs.)
		3 Familiarization & handling of tools. (02 hrs.)	Basic Industrial Terminology, Trade related Tools, their importance, usage and safety
		4 Safety Precautions while handling the tools. (6 hrs.)	<ul style="list-style-type: none"> • Measuring Tools • Marking Tools • Sewing Tools • Drafting Tools • Cutting Tools • Finishing

		<p>5 Identification of fabrics and texture. (6 hrs.)</p> <p>6 Handling of Fabrics. (6 hrs.)</p> <p>7 Making weave samples. (6 hrs.) Measurement on Dummy (6hrs)</p> <ul style="list-style-type: none"> • Tips of taking measurement • Take measurement for dress • Measure a figure <p>8 Market survey</p> <ul style="list-style-type: none"> • Purpose of market • Benefits of market survey • Types of market survey (15hrs.) <p>9 Swatch file</p> <ul style="list-style-type: none"> • Organize fabric swatches • Different types of fabric • Swatch and trim board(10hrs.) 	<p>Fabric Fundamentals</p> <ul style="list-style-type: none"> • Brief idea about fibers • Types of Fabrics • Selection of Needle and thread according to fabric types • Needle Break Policy Fabric Preparation for cutting • Fabric Grain • Selvage • Shrinkage • Straightening the fabric Grains • Measurements • Units • Measuring Techniques • Define the Problem & Research Object • Developing Marketing Research Planning • Collect Needed Information • Implementing Marketing Research Plan • Define the Problem & Research Object • Developing Marketing Research Planning • Collect Needed Information • Implementing Marketing Research Plan • Develop the swatch card of fabric (06hrs.)
		<p>Practice on Industrial Single needle lock stitch Sewing Machine</p> <p>10 Sitting posture — Eye, Hand & Foot co- ordination. (1 hrs.)</p> <p>11. Speed Control. (3 hrs.)</p> <p>12 Practice on paper. (6 hrs.)</p> <p>13 Threading of machine. (1/2 hr.)</p> <p>14 Bobbin winding & loading. (1/2 hr.)</p>	<p>Basic Sewing Machine</p> <ul style="list-style-type: none"> • Parts and functions • Machine needle • Stitch formation • Sewing machine practice • Care and maintenance • Trouble Shooting • Types of Industrial Sewing Machine. <p>(06 hrs.)</p>
		<p>15 Running on (10 hrs.)</p> <ul style="list-style-type: none"> • Straight lines • Square • Zigzag lines • Circle • Semi-circle • Spiral <p>16 Practice on over lock machine (06hrs.)</p> <ul style="list-style-type: none"> • Threading • Running • Minor adjustments 	<p>Over lock machine</p> <ul style="list-style-type: none"> • Parts and functions • Machine practice • Care and maintenance • Trouble Shooting <p>Basic Garment Analysis (06 hrs.)</p>

Professional Skill 183 Hrs.; Professional Knowledge 66 Hrs.	Stitch the following using the given fabric: Seams with seam finishes, Darts, Pleats, Tucks, Gathers & Shirrs, Frill, Hem, Casing, Edge Finishing, Neck lines, Placket, Pocket, Collar, Sleeves, Cuff. (NOS:AMH/N1948)	17 Practice of making Seams (18hrs.) <ul style="list-style-type: none"> Plain Seam (Straight & Curved) with seam finishes Self-Enclosed seams Top stitched seams 	Seams <ul style="list-style-type: none"> Classification Uses Properties of Seams Seam finishes Sewing Aids Presser foots Folders Guides (06 hrs.)
		18 Making Samples of (06hrs.) <ul style="list-style-type: none"> Darts Pleats 	Introducing Fullness <ul style="list-style-type: none"> Darts - Necessity, type & precautions during stitching Pleats - Necessity, type & uses (06 hrs.)
		19 Making Samples of (10 hrs.) <ul style="list-style-type: none"> Tucks Gathers and Shirrs Frills 	Introducing Fullness <ul style="list-style-type: none"> Tucks - Types & use Gathering and Shirring Flare Ruffles/Frills - Types (Straight & Circular) & uses (06 hrs.)
		20 Practice of the corner makings (08hrs.) <ul style="list-style-type: none"> Self-turned With additional strip.) 	Hems <ul style="list-style-type: none"> Types Uses Corner Makings <ul style="list-style-type: none"> Types Uses (06 hrs.)
			Hems <ul style="list-style-type: none"> Types Uses Corner Makings <ul style="list-style-type: none"> Types Uses (06 hrs.)
		21 Making samples of (10 hrs.) <ul style="list-style-type: none"> Casing with Drawstring Casing with elastic Casing with heading Inside applied casing Outside applied casing 22 Making samples of edge finishing (16 hrs.) <ul style="list-style-type: none"> Bias facing Combination shaped facing Outside facing Self-facing Shaped facing Binding Piping 	<ul style="list-style-type: none"> Casing Introduction use Edge Finishing Facings Bindings Pipings (06 hrs.)
		23 Making samples of different shaped necklines. (12 hrs.)	Necklines <ul style="list-style-type: none"> Different shapes of neckline (06 hrs.)

		24 Making samples of Plackets (25 hrs.)	Plackets
		<ul style="list-style-type: none"> Faced Placket Continuous Placket One Piece Placket Two Piece Placket Two-piece Placket with pleat Zippered Placket <ul style="list-style-type: none"> Lapped Fly Front Open End Invisible Visible 	<ul style="list-style-type: none"> Types Sample makings (06 hrs.)
		25 Making samples of different Pockets (18 hrs.)	Pockets
		<ul style="list-style-type: none"> Patch Inseam Cut/slash 	<ul style="list-style-type: none"> Types Design variations (06 hrs.)
		26 Making samples of Collars. (25 hrs.)	Collars
			<ul style="list-style-type: none"> Classification Collar terms. (06 hrs.)
		27 Making samples of Sleeves. (35 hrs.)	Sleeves
			<ul style="list-style-type: none"> Classification Sleeve length variation Sample making of Sleeves with and without cuff. (06 hrs.)
Professional Skill 20 Hrs.; Professional Knowledge 06 Hrs.	Fix the fasteners on the given fabric. (NOS:AMH/N1948) Mend the given fabric. (NOS:AMH/N1949)	28 Practice of fixing fasteners as Buttons, Hooks, Eyes, and Press Studs. (5 hrs.) 29 Practice of making Button holes by Hand. (5 hrs.) 30 Practicing Darning and Patching. (10 hrs.)	Trimmings
			<ul style="list-style-type: none"> Types Applications Fixing of Buttons, hooks etc. Making of Buttonhole Mending Darning Patching (06 hrs.)
Professional Skill 36 Hrs.; Professional Knowledge 12 Hrs. Professional Skill 36 Hrs.; Professional Knowledge 12 Hrs.	Draft a pattern for Ladies' Suit. (NOS:AMH/N1947) Sew a Ladies' Suit with the help of the given pattern. (NOS:AMH/N1947) Sketch the following manually by applying suitable fabric designs- Indian Dresses & Western Dresses. (NOS:AMH/N1211)	31 Stitching of Ladies suit. (26 hrs.)	Drafting & developing Pattern for Ladies suit. (12 hrs.)
		<ul style="list-style-type: none"> Spec Sheet Cost sheet Swatch Card (10 hrs.) 	
		32 Practice of taking Body Measurements. (12 hrs.) Record measurement with style features	Human Figures
			<ul style="list-style-type: none"> Eight Head Theory Brief introduction about Joints and Muscles Types of Figures Body Measurements Importance Types & Measuring Techniques Precautions Size Charts (National & International) for Children, Ladies and Gent's wear Importance of Size Charts (06 hrs.)

		<p>33 Practicing Different types of spreading using different types of fabrics. (12 hrs.)</p> <p>34 Practicing different types of layout using the given patterns using. (12 hrs.)</p>	<p>Patterns</p> <ul style="list-style-type: none"> • Importance • Types <p>Spreading</p> <ul style="list-style-type: none"> • Types of Spreading • Methods • Types of Lay Pattern Layout • Importance • Types of layout Pattern Drafting • Drafting/Pattern <p>Terminology</p> <ul style="list-style-type: none"> • Principles of Pattern drafting. (06 hrs.)
Professional Skill 95 Hrs.; Professional Knowledge 24 Hrs.	Design the following with suitable fabric design using Corel draw software- Indian Dresses & Western Dresses.	<p>Kids wear</p> <p>35 Pattern making using adaptation technique, Fabric Estimation, Cutting and Sewing of the garments for the following groups – (70 hrs.)</p> <ul style="list-style-type: none"> • Children • Bloomer, Yoke Frock, A Line Frock 	Drafting of Children's Block Pattern Set (Bodice, Sleeve, Skirt and Trousers) Adaptation & Pattern Development (18 hrs.)
		36 Draw different lines & develop designs with geometrical shapes & free hands Develop color wheel & design with different color schemes. (25 hrs.)	Study of Corel Draw Software. Drawing & Coloring. Type & characteristics of lines Geometrical shapes & its application, Color, its type & application, Color Scheme. (06 hrs.)
Professional Skill 60 Hrs.; Professional Knowledge 12 Hrs.	Make the following Block Pattern set using different sizes taken from a size chart - Children's Block, Block for Teenager, Ladies Block, Gents Block. (NOS:AMH/N1105)	<p>37 Sketching of (30 hrs.)</p> <ul style="list-style-type: none"> • Indian Dresses • Western Dresses <p>38 Drafting of Ladies' Block Pattern Set (Bodice, Sleeve, Skirt and Trousers). (30 hrs.)</p>	<p>Elements & Principles of Designs Brief Idea of Garment Sketching Design Development Market Survey Boutique Management (06 hrs.)</p> <p>Block Pattern</p> <ul style="list-style-type: none"> • Introduction • Importance (06 hrs.)
Professional Skill 36 Hrs.; Professional Knowledge 12 Hrs.	Make the Patterns for the following using Draping Techniques - Basic Bodice with Darts, Basic Bodice with Princess line, Basic Straight Skirt, Basic Circular Skirt. NOS:AMH/N1105)	<p>39 Practice of developing dress Pattern from Draping Technique (36 hrs.)</p> <ul style="list-style-type: none"> • Basic Bodies (Darts, Princess line) • Basic Skirt (Straight, Circular) 	<p>Draping</p> <ul style="list-style-type: none"> • Introduction • Process & Techniques • Importance (12 hrs.)
Professional Skill 110 Hrs.; Professional Knowledge 24 Hrs.	Construct the following garments with fitting and quality according to the sketched designs and blocks using adaptation/ draping and manipulation tech-	<p>40 Dart Manipulation Collar Manipulation Sleeve Manipulation. (20 hrs.)</p> <p>41 Practice on special industrial sewing machines</p> <ul style="list-style-type: none"> • Double Needle Machine • Button Hole Machine • Button Sewing Machine 	<p>Manipulation</p> <ul style="list-style-type: none"> • Principles • Methods • Types <p>Mass Production Process -</p> <ul style="list-style-type: none"> • Sequence of operations • Types of cutting machines • Fusing Technology

	<p>niques. - Dress for Children (Yoke Frock), Dress for Teenager, Ladies Dress, Ladies Suit, Ladies Night wear, Ladies Blouse, gents' Shirt, gents' trouser.</p> <p>(N O S : A M H / NO701)</p>	<ul style="list-style-type: none"> • Multipurpose Machine (Zig-zag) (34 hrs.) 	<ul style="list-style-type: none"> • Types of Industrial Machines Used in sewing section. • Finishing (12 hrs.)
		<p>Ladies wear</p> <p>42. Pattern Making using Draping/ adaptation. (18 hrs.)</p> <p>43. Fabric Estimation, Cutting and Sewing of the following garments (35 hrs.)</p> <ul style="list-style-type: none"> • Ladies Dress • Ladies Suits • Night wears • Blouses • Pressing & Folding checking • the fitting of the garment <p>44. Alteration /as per requirement of individual/record(3hrs.)</p>	<p>Designing, Sketching and drafting of the following garments</p> <ul style="list-style-type: none"> • Ladies Dresses • Ladies Suits • Night wears • Blouses (12 hrs.)
Professional Skill 82Hrs.; Professional Knowledge 24 Hrs.	<p>Make patterns of the following by Pattern Grading techniques to their next higher or lower sizes using the size charts.</p> <p>(N O S : A M H / N1105)</p>	<p>Gents wear</p> <p>45 Pattern making using adaptation, Fabric. (18 hrs.)</p> <p>46 Estimation, Cutting and Sewing of the following garments-Shirts & Trousers. (45 hrs.)</p> <p>47 Pressing & Folding checking the fitting of the garment. (3 hrs.)</p>	<p>Designing, Sketching and drafting of Ladies' Suit with variation of Angarkha, Flared, Yoked etc. (18 hrs.)</p>
		<p>48 Pattern Grading of Gent's Shirt. (10 hrs.)</p> <p>49 Pattern Grading of Gent's Trousers. (6 hrs.)</p>	<p>Pattern Grading</p> <ul style="list-style-type: none"> • Types • Methods (06 hrs.)
Professional Skill 80 Hrs.; Professional Knowledge 18 Hrs.	<p>Make markers on different width, texture & designs of the following- Frocks, Blouses, Shirts, Trousers.</p> <p>(N O S : A M H / NO201)</p>	<p>50 Practice of developing designs with Corel draw tools. (40 hrs.)</p> <p>51. Methods of removing different kinds of stains in fabrics. (6 hrs.)</p> <p>52 Checking of garments in respects of – (10 hrs.)</p> <ul style="list-style-type: none"> • Measurements • Stitching • Stains • Defects • Correcting measures 	<p>Study on Corel Draw Software Stains</p> <ul style="list-style-type: none"> • Classification, removing techniques Selection of dresses according to Occasion, occupation, Climate, Personality, Age & Sex. <p>Quality aspects</p> <ul style="list-style-type: none"> • Definition, Factors affecting the Quality, Benefits of Quality Control • Indian and International Standard • Types of Inspection- AQL (12 hrs.)
		<p>53 Making Marker on different Width, Texture & Design for Frocks, Blouses, Shirts, and Trousers. (24hrs.)</p>	<p>Marker</p> <ul style="list-style-type: none"> • Necessity, Types, Preparing markers according to the fabric designs (06 hrs.)

Familiarization with the institute

Objectives: At the end of this lesson you shall be able to

- state the staff structure of the institute
- state the available trades in the institute and their activities.

The Industrial Training Institute throughout India follow the same syllabus pattern given by the National council for Vocational Training (NCVT). In India there are about 13,350 Government ITIs and Private ITI 's as per the Govt. of India, Ministry of Skill Development and Entrepreneurship (MSDE) Annual report of 2016-2017. The Government Industrial Training Institute in each state work under the Directorate of Employment and Training which is a department under the Labour Ministry in most of the states.

The Head of the industrial training institute is the Principal, under whom there is one vice-principal, Group Instructor(s) Training officers and a number of Vocational Instructor(s) Assistant Training Officer(s) and Junior Training Officer and so on as shown in the Organisation Chart of ITI. (Fig 1)

In every industrial training institute there is a store and the in charge of the store is storekeeper for inward and outward

movement of tools, equipment and consumables. The instructor will indent the training requirement on receiving from stores, the instructor will issue the training requirement to the trainees according to the graded exercises as per syllabus.

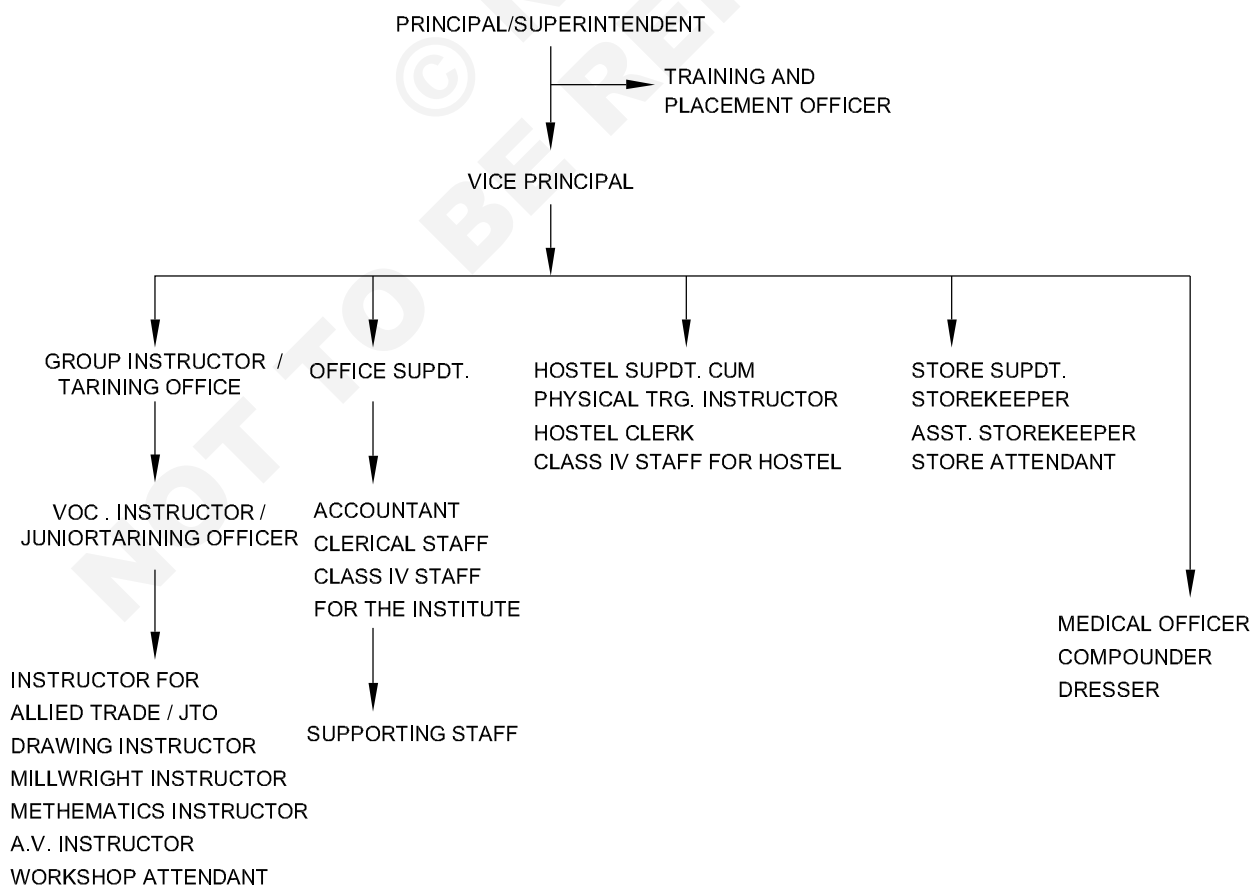
The basic moto of providing industrial training is to give hands to training to the new trainees so as to make them as skilled labour/industrial workers/or self employed entrepreneur.

The function of stores in the ITI is to provide the raw material and machine tool equipments and to take care of machine and their maintenance.

Instructor gets the raw material and the tool equipments from the stores and issue to the trainees for training and to carryout the job.

Fig 1

ORGANISATIONAL CHART OF ITI



Practice of hand stitches & making samples of them

Objectives: At the end of this exercise you shall be able to

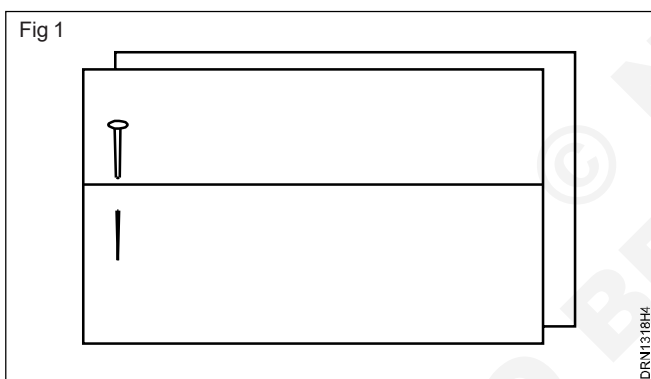
- stitch even basting by hand
- stitch uneven basting by hand
- stitch diagonal basting by hand
- stitch slip basting by hand
- stitch tailor's tacks by hand.

Requirements			
Tools/Instruments		Materials	
• Scale - 12"	- 1 No.	• Cotton fabric 10cm × 6cm	-1 No.
• Pencil HB	- 1 No.	• Thread	-1 No.
• Scissor - 8"	- 1 No.	• Needle	-1 No.
		• Measuring tape	-1 No.

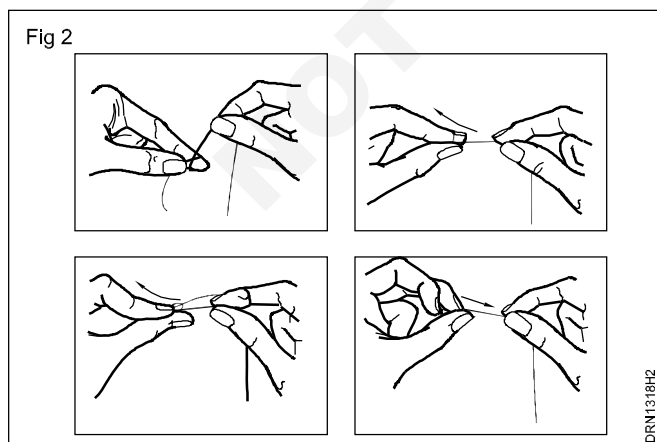
PROCEDURE

TASK 1 : Stitch even basting

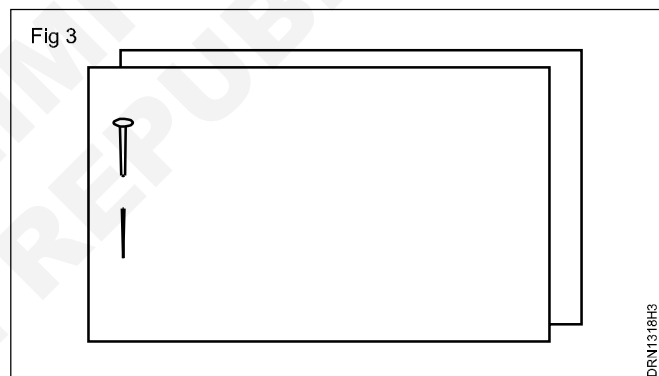
- 1 Cut two cotton fabric pieces of size (10cm × 6cm)
(Fig 1)



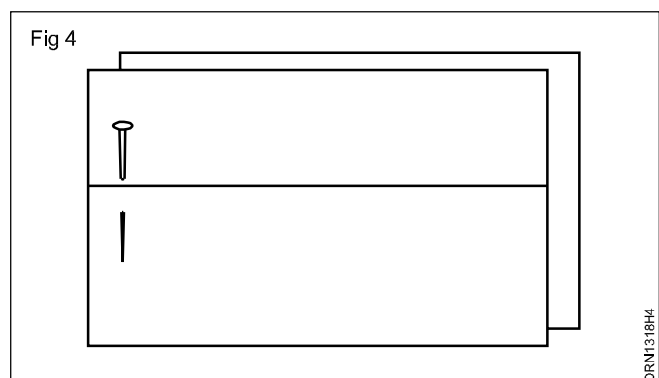
- 2 Cut (50 cm) thread from the cone.
- 3 Make a knot at one end of the thread. (Fig 2)



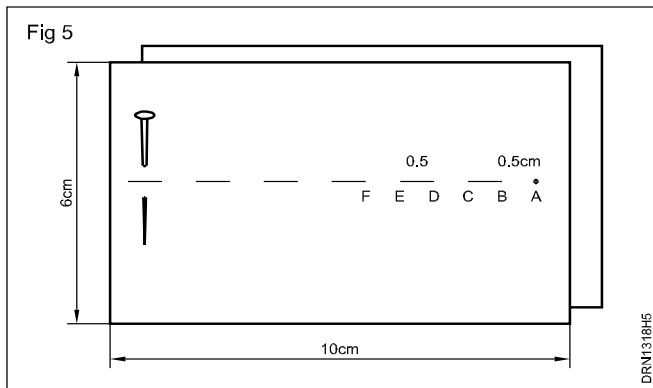
- 4 Fix one fabric over the other fabric using ball pin.
(Fig 3)



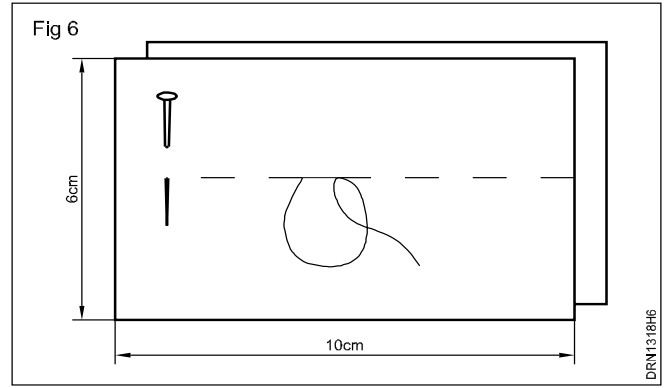
- 5 Draw a horizontal line at the center of the fabric.
(Fig 4)



- 6 Mark equal stitch length with distance of (0.5cm) on the fabric. (Fig 5)
- 7 Bring the needle from the bottom of the fabric at point 'A' and pull the thread fully to the top layer. (Fig 6)



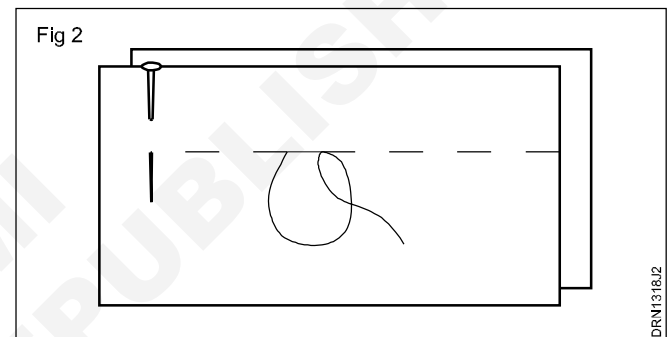
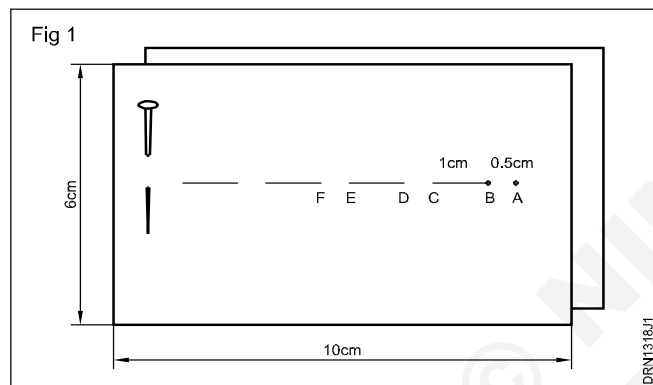
- 8 Insert the needle at point 'B' and bring the needle through point 'C' from the bottom of the fabric.



- 9 Insert needle into point 'D' and pull through 'E' and continue stitching with equal spaced.

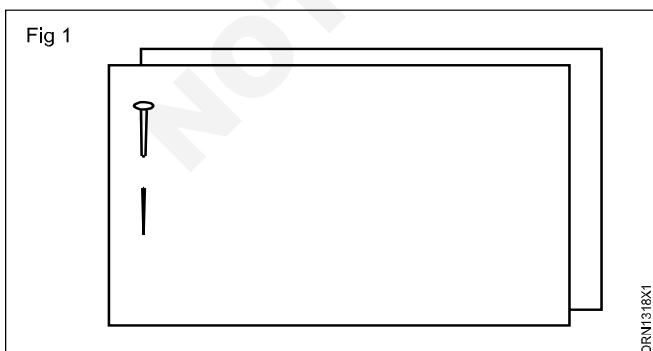
TASK 2 : Stitch uneven basting

- Follow the step 1 to 15 of task 1.
- Mark points of 1cm and 0.5cm alternatively by naming A,B,C,D,E. (Fig 1)

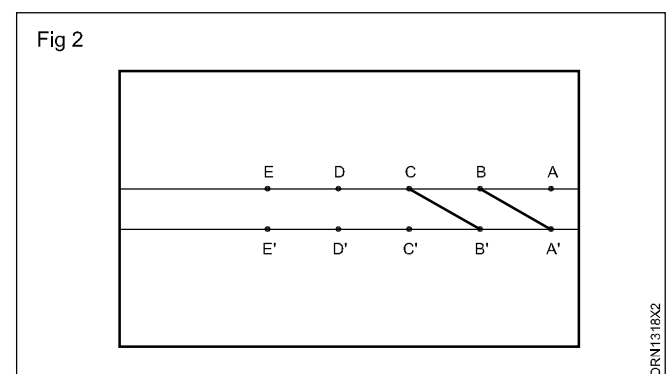


TASK 3 : Stitch diagonal basting

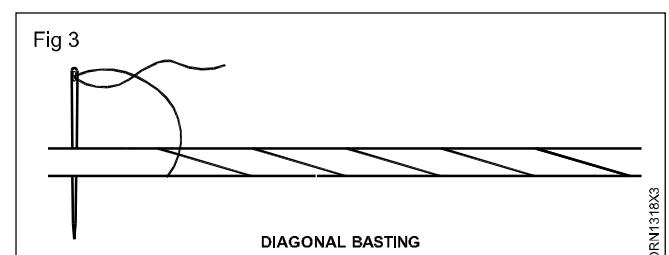
- Cut two cotton fabric pieces of size 10cm x 6cm.
- Fix one fabric over the other fabric using ball pin (Fig 1).
- Draw 2 horizontal lines at the centre of the fabric with a distance of 1cm.
- Mark points on the lines at equal distance on both the lines naming as A,B,C,D and A', B', C',D',...



- Bring the threaded needle from point 'A' from the base of the fabric.
- Insert the needle from 'B' to 'B'' and pull the thread, diagonal stitch is formed (Fig 2).

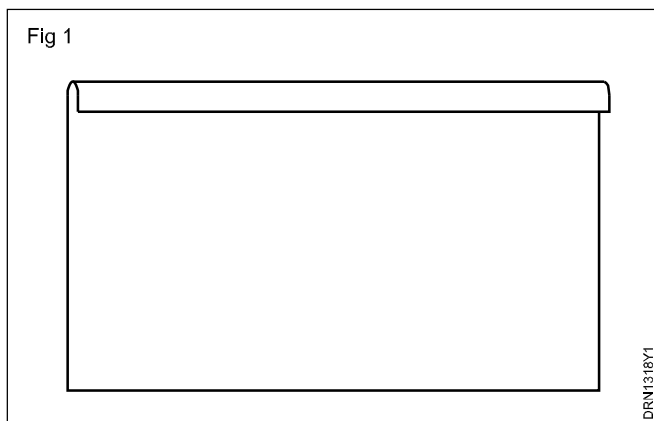


- 7 Repeat the same procedure along the points and finish the diagonal stitch with the knot at the base of the fabric (Fig 3).

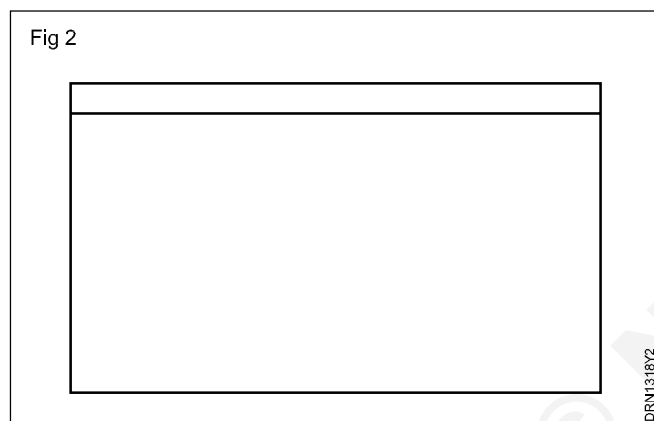


TASK 4 : Slip basting

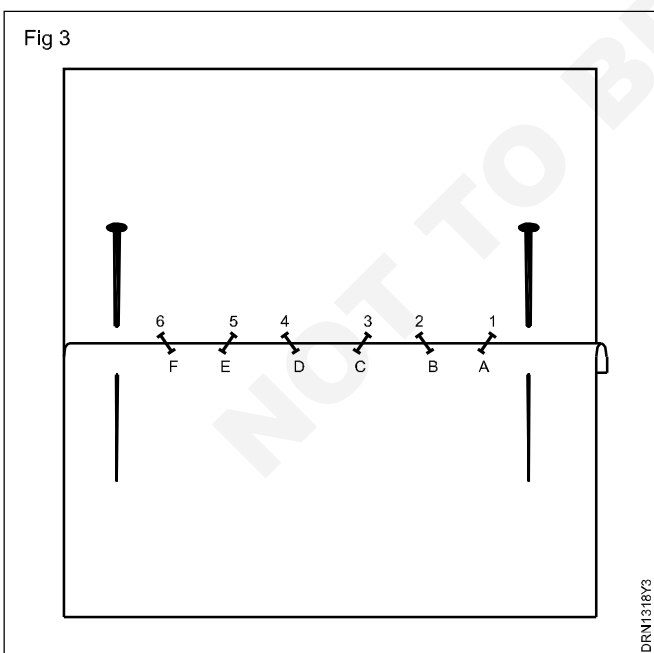
- 1 Cut two cotton fabric pieces of 10cm × 6cm. (Fig 1)



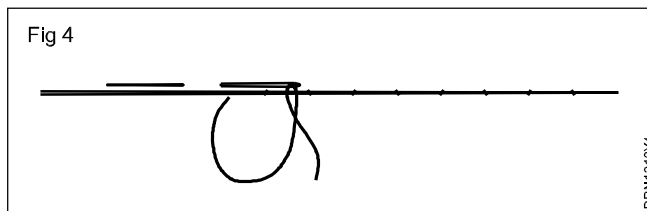
- 2 Take one piece and fold the edge of the fabric to 1.5cm. (Fig 2)



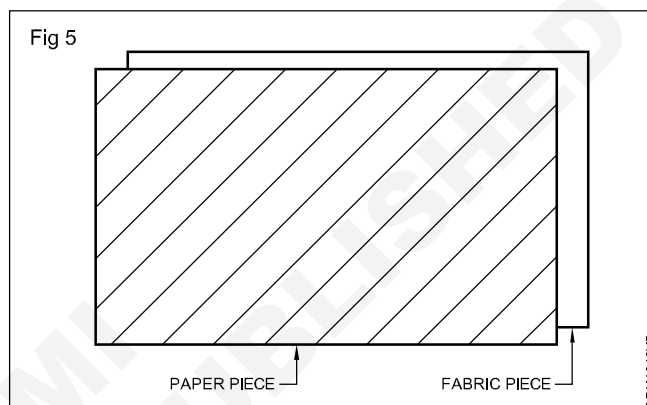
- 3 Mark 1.5cm at the other edge of the fabric. (Fig 3)



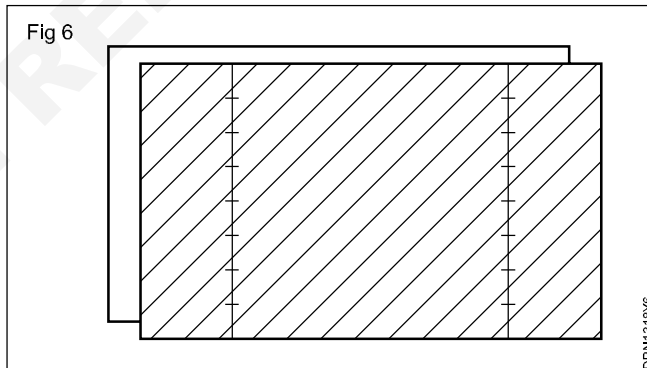
- 4 Place the folded fabric over the other flat fabric on the 1.5cm mark from the edge and pin on both the edges. (Fig 4)



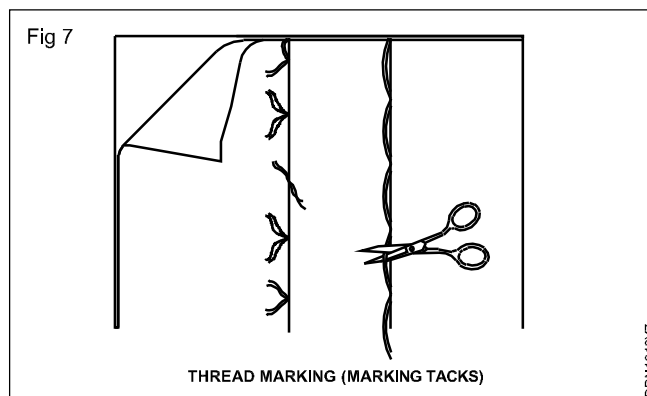
- 5 Mark slant small line on both the fabrics together naming 1,2,3,4 on top fabric and A,B,C,D on the base of the fabric. (Fig 5)



- 6 Bring the needle out at the point 'A' from the base of the pinned fabric. (Fig 6)



- 7 Insert the needle backside through 1' and bring it out at '2', again insert the needle. (Fig 7)



Apparel Dress Making - Textile and Hand Work Basic Operations

Exercise 1.1.03



Scan the QR Code to view the video for this exercise

Handling of tools

Objective: At the end of this exercise you shall be able to

- identify the tools.

Requirements

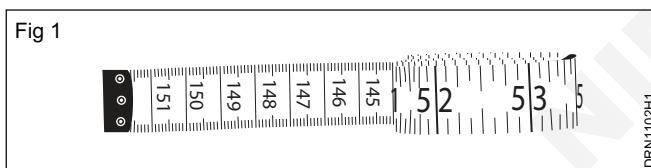
Tools/Instruments

- | | | | |
|----------------------|---------|--------------------------|----------|
| • Tape Measure | - 1 No. | • Flexible Plastic ruler | - 1 No. |
| • 'L' scale | - 1 No. | • Pencil | - 2 Nos. |
| • Measure Stick | - 1 No. | • Eraser | - 2 Nos. |
| • Tailor's Art Curve | - 1 No. | • Tailor's chalk | - 4 Nos. |
| • Card scale | - 1 No. | • Tracing Wheel | - 1 No. |
| • Pattern Square | - 1 No. | • French Curve | - 1 No. |
| • Set Square | - 1 No. | • Seam Gauge | - 1 No. |
| • Transparent Ruler | - 1 No. | • Dress Makers Gauge | - 1 No. |
| • Curve Rules | - 1 No. | • Loop Turner | - 1 No. |

PROCEDURE

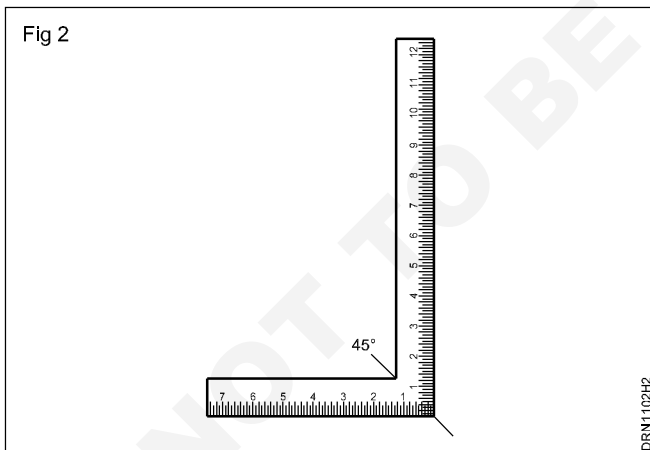
1 Tap Measure

Fig 1



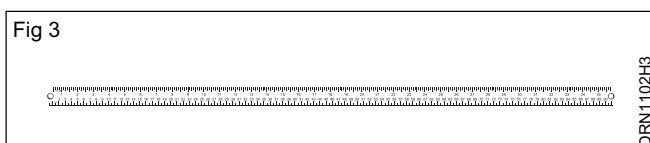
2 'L' Scale

Fig 2



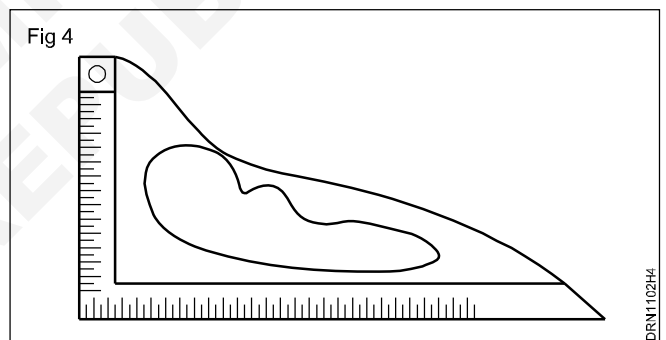
3 Measure Stick

Fig 3



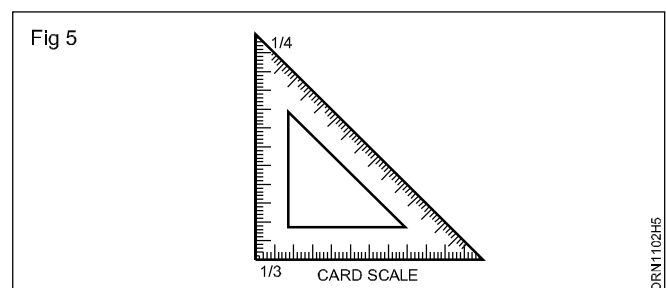
4 Tailor's Art Curve

Fig 4



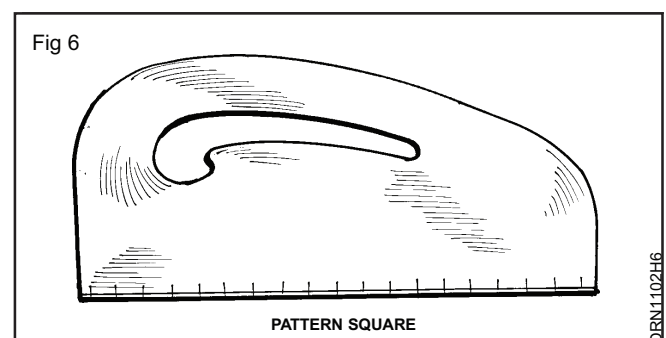
5 Card scale

Fig 5

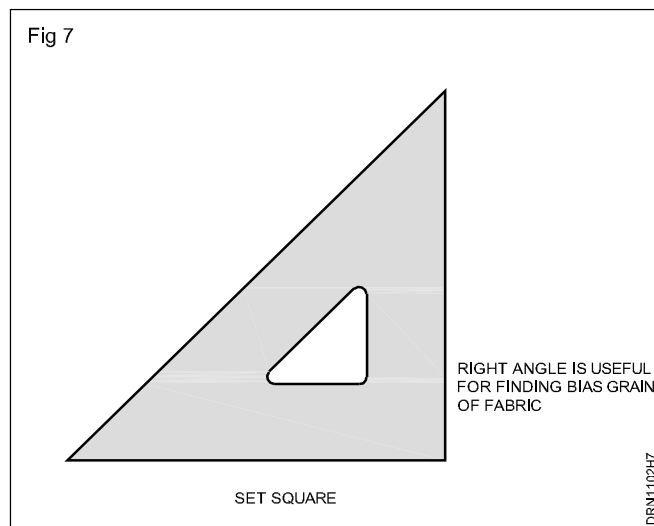


6 Pattern Square

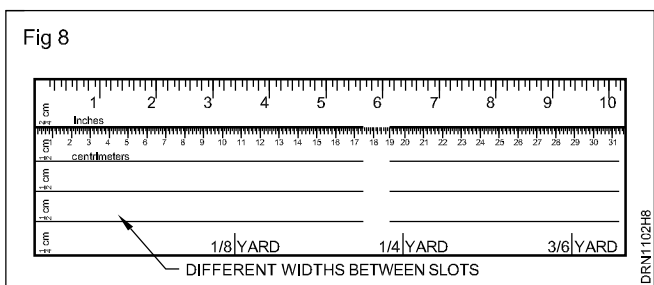
Fig 6



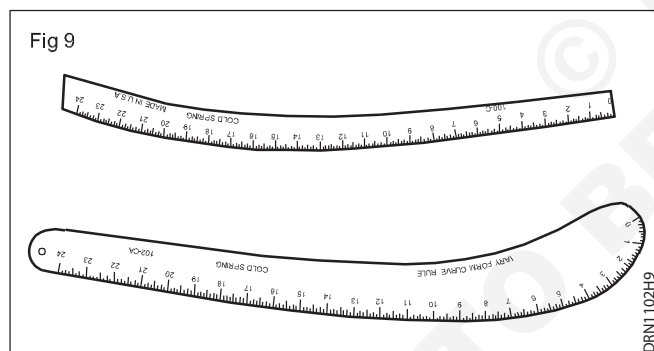
7 Set Square



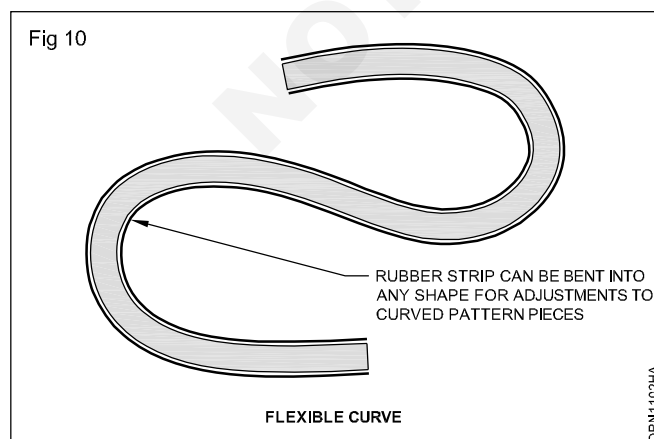
8 Transparent Ruler



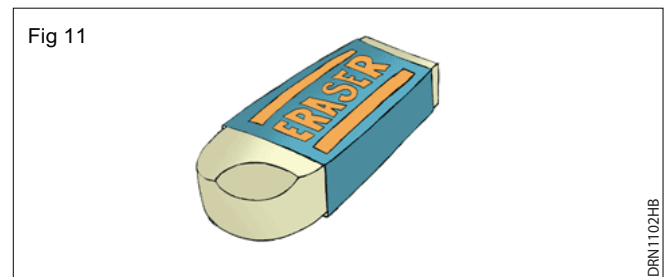
9 Curve Ruler



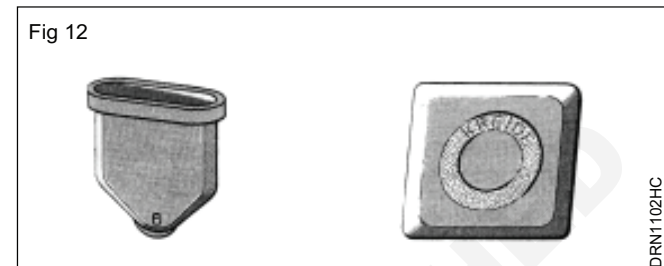
10 Flexible plastic ruler



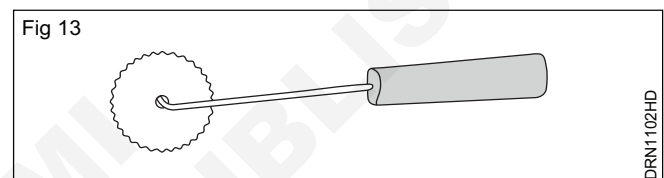
11 Eraser



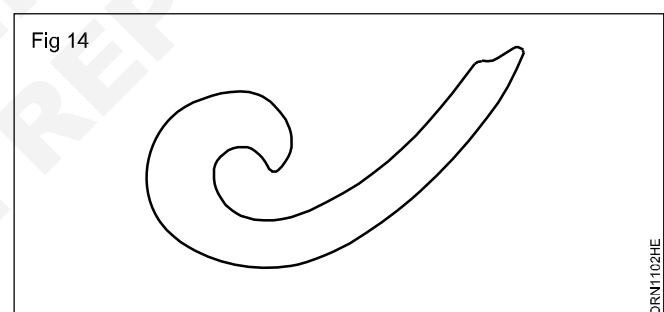
12 Tailor's Chalk



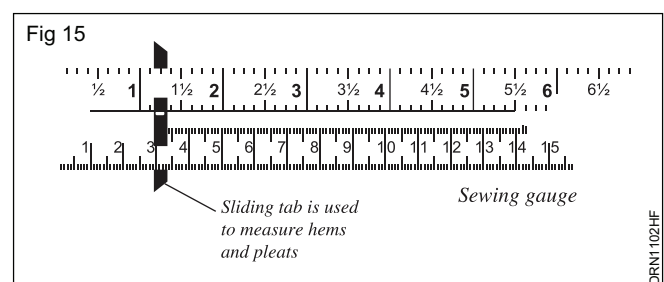
13 Tracing Wheel



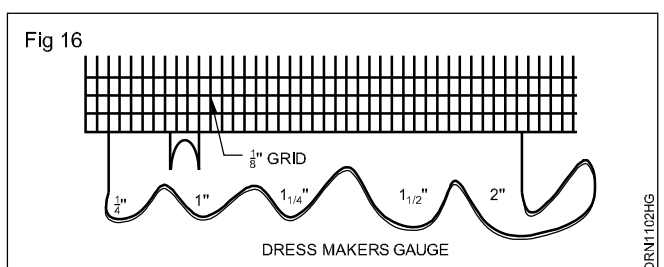
14 French Curve



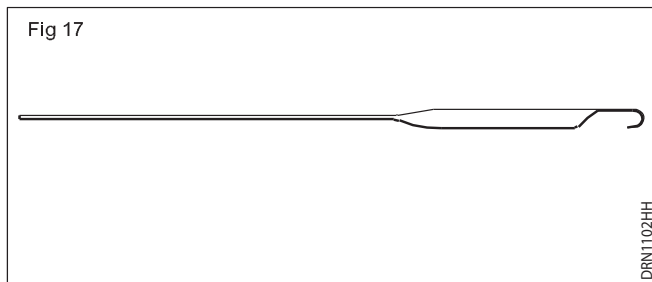
15 Seam Gauge



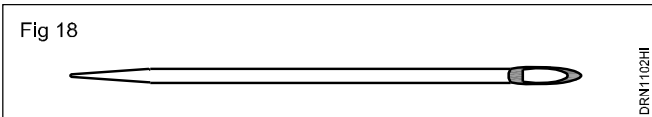
16 Dress Makers Gauge



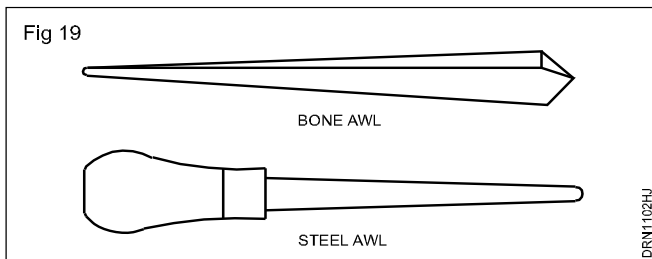
17 Loop Turner



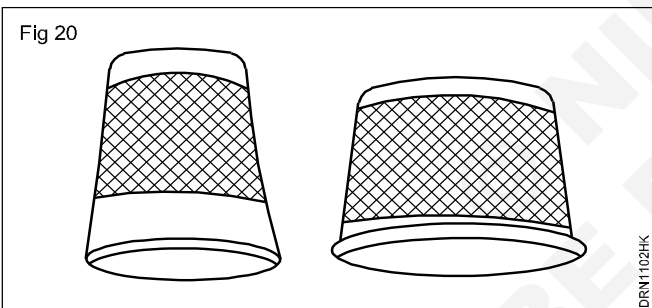
18 Bodkin



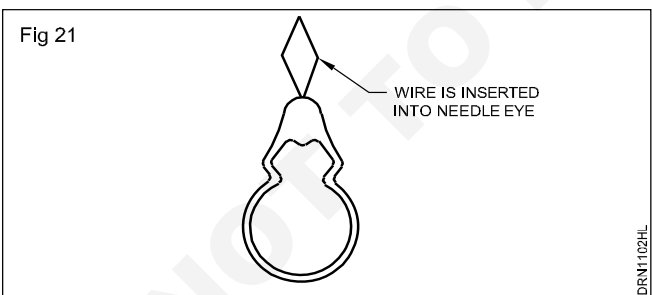
19 Awl or Stiletto



20 Thimble



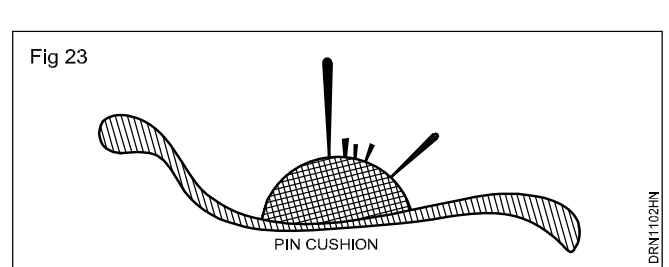
21 Needle threader



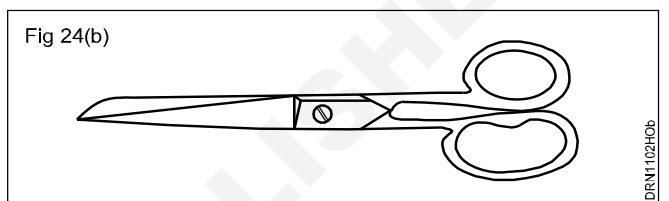
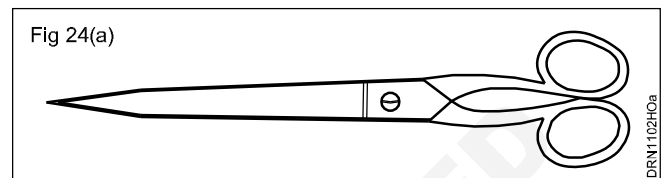
22 Dress Marker's Pin



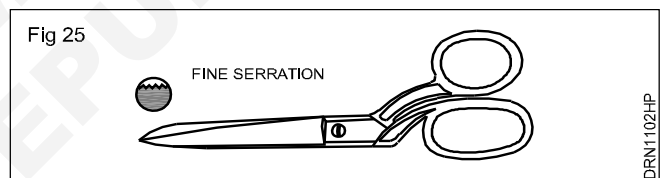
23 Pin Cushion



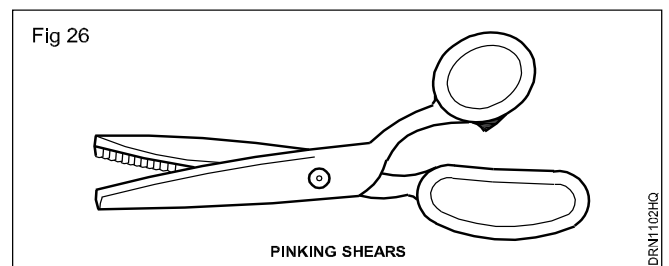
24 Paper Cutting Scissors



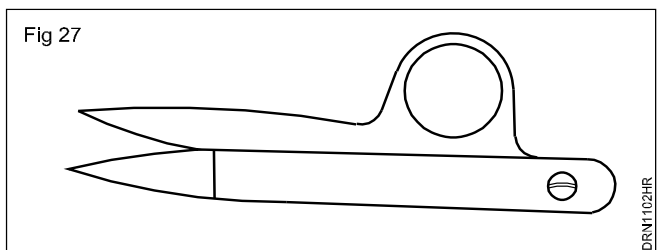
25 Fabric Cutting scissors



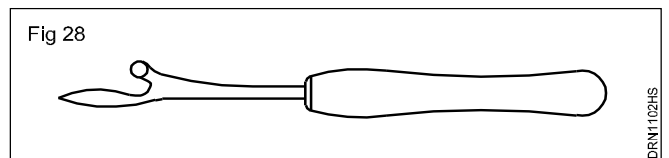
26 Pinking Shears



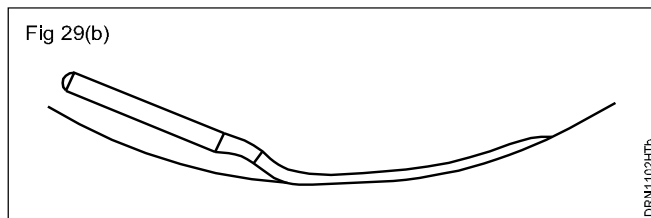
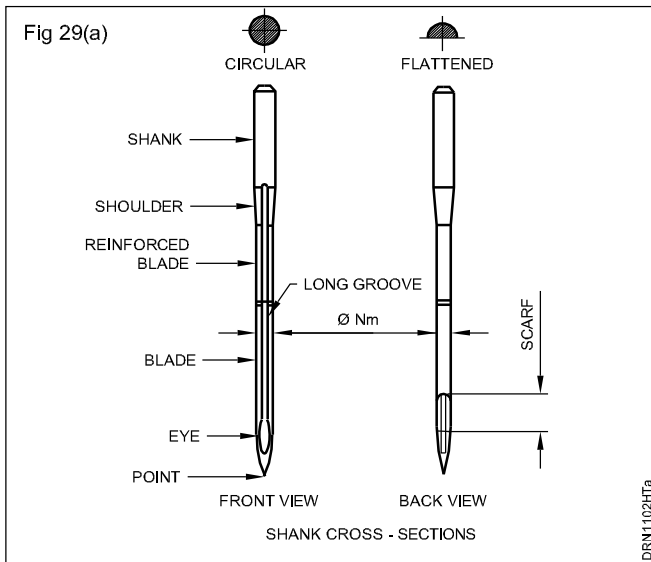
27 Thread Cutter



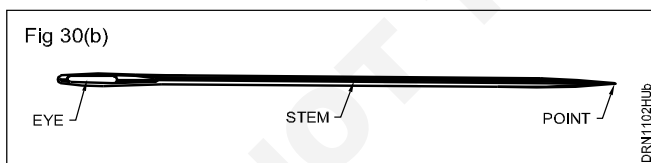
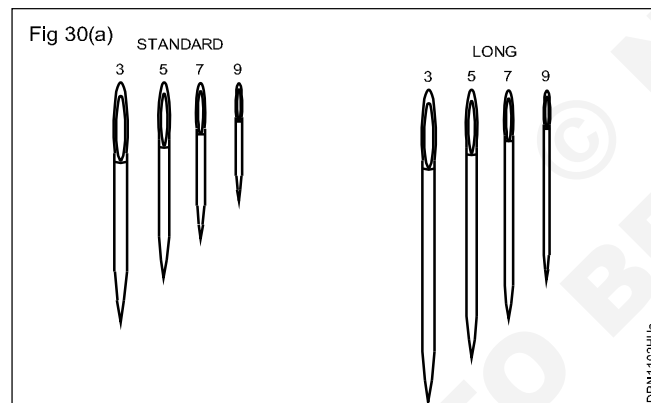
28 Seam Ripper



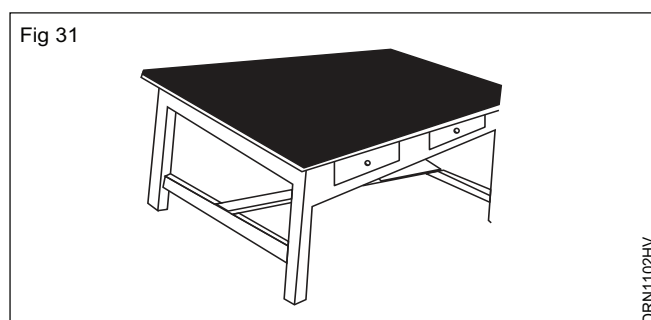
29 Machine Needles



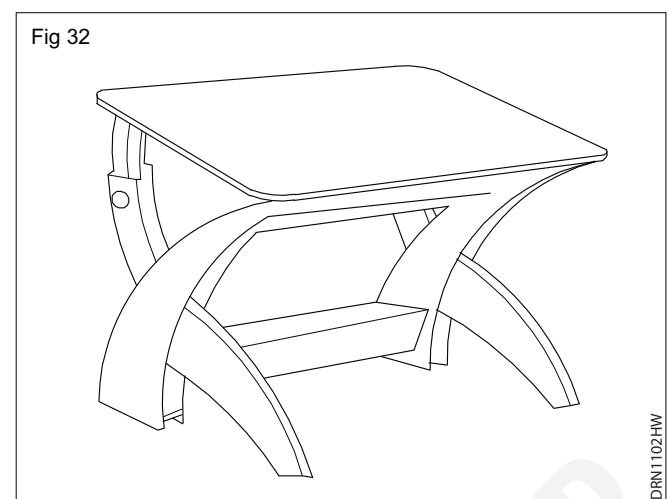
30 Hand Needles



31 Drafting Table



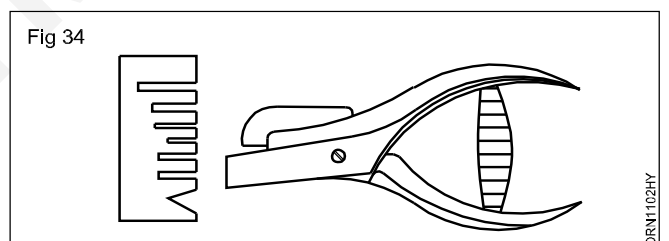
32 Pressing Table/Stand



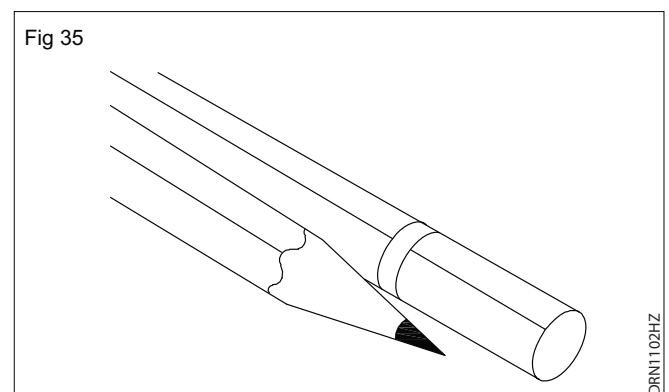
33 Spray bottle



34 Notcher



35 Pencil



Safety precautions while handling the tools

Objective: At the end of this exercise you shall be able to

- **explain the importance of safety precautions and the steps to follow.**
-

PROCEDURE

Security is important to everyone. Coaches are responsible for maintaining a safe workplace. Extreme care is required when working on the machine. All trainers should learn the following safety.

- 1 The work area should be cleaned immediately with oil spilled on the floor.
- 2 Make sure the thread is threaded correctly on the needle before operating the machine.
- 3 Keep your feet away from the pedal when threading the needle
- 4 Turn off the motor when the machine is not working.
- 5 Avoid wearing loose clothing while operating the machine. If your hair is long it should be tied properly.
- 6 When using sharp tools such as needles, scissors, sewing needles and acupuncture, we need to make sure that the sharp part is in the hand and the grip part is in the buyer's hand.
- 7 When not using a sewing machine, store it safely in a dry, clean place away from moisture.

Identify the fabric and texture

Objectives: At the end of this exercise you shall be able to

- identify the structure of the given fabric samples
- determine the texture of the given woven fabric samples.

Requirements			
Tools/ Instruments		<ul style="list-style-type: none"> • Woven fabric samples (in different textures 10 cms x 10 cms) - 10 Nos 	
<ul style="list-style-type: none"> • Counting glass or magnifying lenses - 1 No. 			
Materials			
<ul style="list-style-type: none"> • Woven fabric, knitted fabric, Non woven fabric, Lace fabric & Fur fabric (All should have 10 cms x 10 cms) 	- 3 Nos each		

PROCEDURE

TASK 1: Identify the structure of the given fabric samples

- 1 Give identification codes nos. like 1,2,3,...15 to the fabric samples.
- 2 Take the sample no.1 and place the fabric sample on the table.
- 3 Analyze the fabric structure with the help of the magnifying lenses.
- 4 Compare the fabric structure with the Fig 1 and identify which fabric of Fig 1 is matching with the sample.



5 Write the name of the fabric in the respective row of sample no.1 in the following table

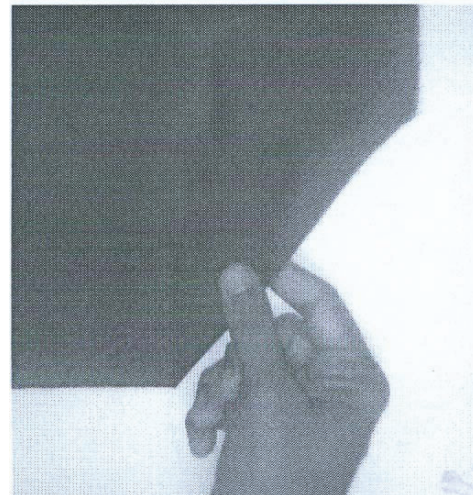
6 Repeat the above procedure for the remaining samples and fill the table.

Sl. No.	Sample Code	Name of the fabric structure
1	Sample No.1	
2	Sample No.2	
3	Sample No.3	
4	Sample No.4	
5	Sample No.5	
6	Sample No.6	
7	Sample No.7	
8	Sample No.8	
9	Sample No.9	
10	Sample No.10	
11	Sample No.11	
12	Sample No.12	
13	Sample No.13	
14	Sample No.14	
15	Sample No.15	

TASK 2: Determine the texture of the given woven fabric samples

- 1 Give identification codes nos. like 1,2,3,... 10 to the fabric samples.
- 2 Take the sample no.1 and place the fabric sample on the table.
- 3 Slightly fold the fabric sample and touch it by the thumb and index finger of your hand and feel the thickness. (Fig 1)
- 4 Analyze whether it is a thin fabric or thick fabric or medium fabric.
- 5 If it is thin fabric write "Light weight" on the column of "Weight of the fabric" at the row of Sample No. 1 in the given table below.

Fig 1



DRN1104J1

Sl. No.	Sample Code	Weight of the fabric	Smooth or Rough	Transparent or Non Transparent
1	Sample No.1			
2	Sample No.2			
3	Sample No.3			
4	Sample No.4			
5	Sample No.5			
6	Sample No.6			
7	Sample No.7			
8	Sample No.8			
9	Sample No.9			
10	Sample No.10			

- 6 If it is thick fabric write "Heavy weight" on the column of "Weight of the fabric" at the row of Sample No.1 in the given table above.
- 7 If it is between the thick and thin, then write "Medium weight" on the column of "Weight of the fabric" at the row of Sample No.1 in the table.
- 8 Touch the fabric by your thumb and index finger and determine whether the sample is smooth or rough.
- 9 If the fabric sample is smooth then write "Smooth" on the column of "Smooth or rough" at the row of Sample No.1 in the table.
- 10 If the fabric sample is rough then write "Rough" on the column of "Smooth or rough" at the row of Sample No.1 in the table.
- 11 Place your hand below the fabric sample and check the transparency of the fabric. (Fig 2)
- 12 If you can see your hand properly through the fabric sample then write "Transparent" on the column of "Transparent or Non Transparent" at the row of Sample No.1 in the table.
- 13 If you cannot see your hand properly through the fabric sample then write "Non Transparent" on the column of "Transparent or Non Transparent" at the row of Sample No.1 in the table.

Fig 2



DRN1104J2

- 14 Repeat the above procedure for all the other samples and fill the columns of the table.

Note: Get it checked with your instructor.



Scan the QR Code to view
the video for this exercise

Handling of fabrics

Objective: At the end of this exercise you shall be able to

- **Checking the fabric before cutting.**

Requirements

Materials

- Any fabric - as reqd.

PROCEDURE

Checking the fabric before cutting

- 1 Soak the cloth in water / let it dry before cutting yourself.
 - Soak if it is a cotton cloth.
 - If it has shrunk before, there is no need to soak.
 - No need to soak if it is silk or wool. It will always be dry.
- 2 Iron the cloth after cleaning.
- 3 Iron the fabric behind the fabric. Make sure the fabric is threaded and look for it if it does not come to the thread according to the following procedure. Take a piece of cloth.
- 4 From a sew, pull the yarn into a cross thread.
- 5 "Cut the fabric in the line formed by pulling a thread through the fabric.
- 6 "Pull the fabric diagonally to the opposite ends to align the thread flow.
- 7 "Pull the fabric from one side to the other."In the present tense.

Make weave samples

Objectives: At the end of this exercise you shall be able to

- make warp sheet and plain weave sample
- prepare twill weave & satin weave sample.

Requirements

Tools/Instruments

- | | |
|-------------------------|---------|
| • Shears | - 1 No. |
| • Scale (30 cms length) | - 1 No. |
| • HB Pencil | - 1 No. |
| • 2HB Pencil | - 1 No. |
| • Pencil eraser | - 1 No. |
| • Measuring tape | - 1 No. |
| • Dress form | - 1 No. |

Materials

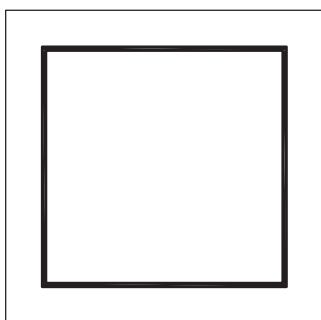
- | | |
|----------------------------|---------------------------------|
| • Cotton tape (1 cm width) | - 16 m (8m each in two colours) |
| • Card board (15x15 cms) | - 4 Nos |
| • Fabric guide | - 1 Medium size tube |
| • Paper or note book | - as reqd. |

PROCEDURE

TASK 1: Make warp sheet sample (Fig 1)

- 1 Take the card board and dark thick lines 2.5 Cms. from the edge all the side using HB pencil. (Fig 1)

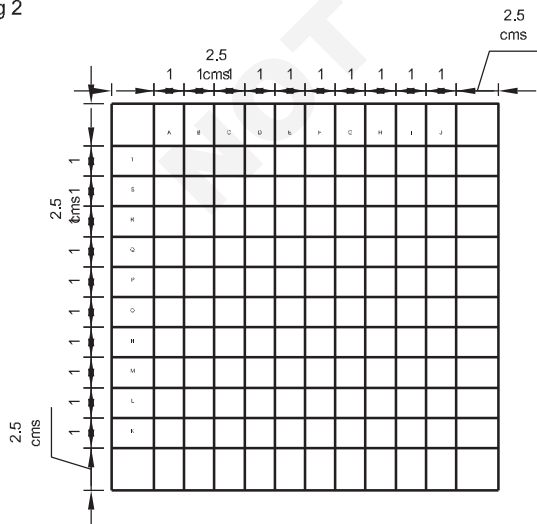
Fig 1



DRN1106H1

- 2 Draw Guide lines as shown in Fig 2 using 2H pencil. Also notations like A, B, C etc. as shown in the (Fig 3).

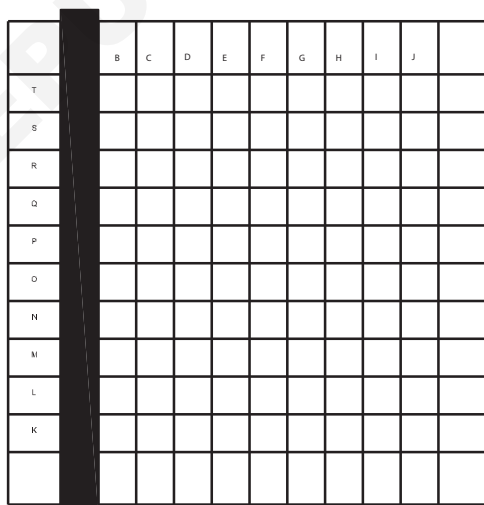
Fig 2



DRN1106H2

- 3 Take a cotton tape in one colour and cut 18 cm of tape with help of shears, place the tape on column a as shown in the (Fig 3)

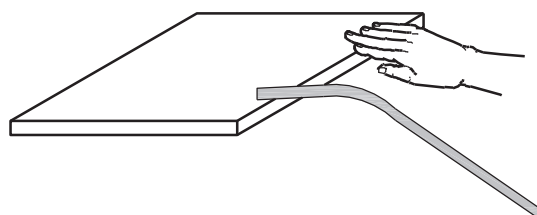
Fig 3



DRN1106H3

- 4 Measure 1.5 cms of the tape and paste it properly with the help of fabric Glue on the wrong side of the card board as shown in the (Fig 4).

Fig 4

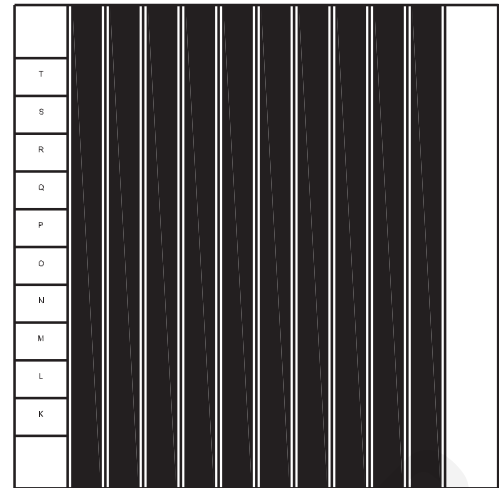


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Be sure that the tape should be in straight condition and should mate h with column portion of A as in right side of the card board.

- Turn the right side of the card board align the tape on column 'A' and turn the bottom portion of the table to the wrong side of the card board and fix it properly with the help of glue
- Repeat the above process of the remaining column B to J as shown in Fig 5.
- Make another B no. of warp sheet as her above method.

Fig 5

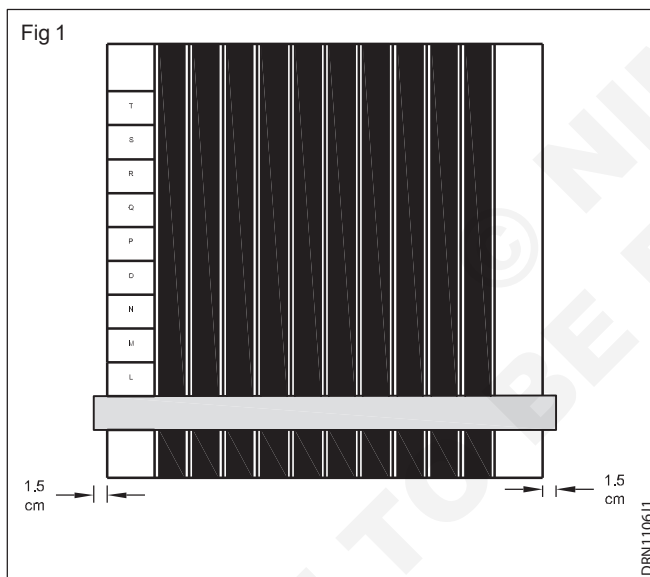


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TASK 2: Make plain weave sample

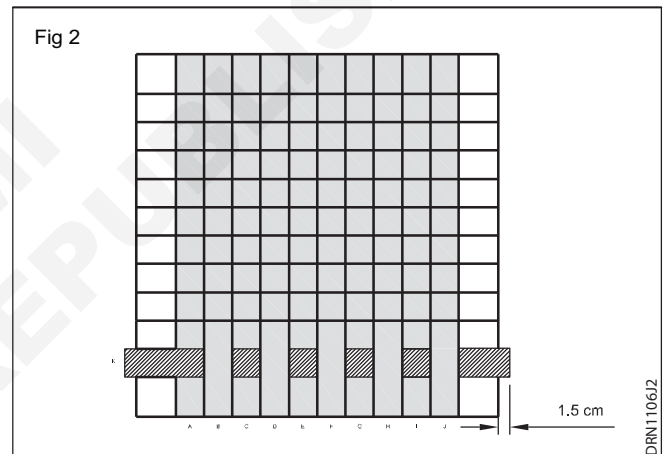
- Take a warp sheet, sample.
- Cut 18 cm of cotton tape from contrasting colour and place on the row K as shown in the Fig 1.

Fig 1



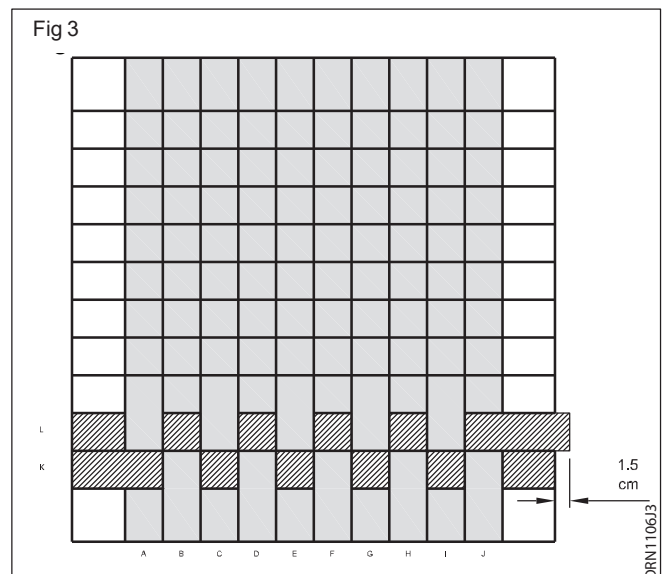
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Fig 2



DRN1106J2

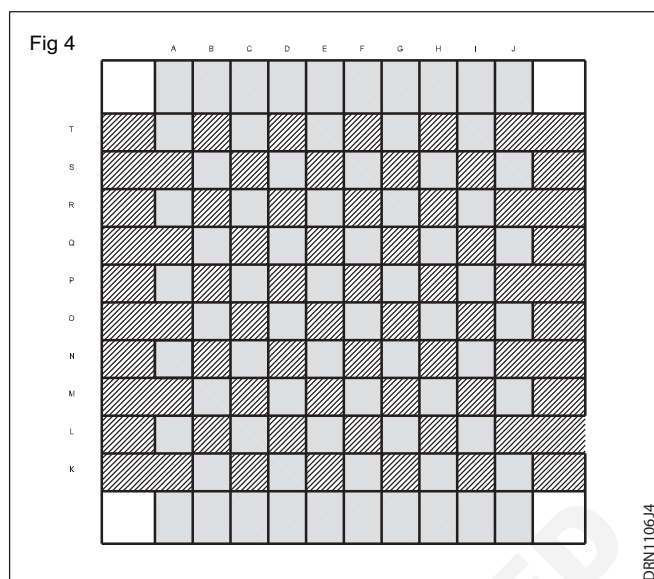
Fig 3



DRN1106J3

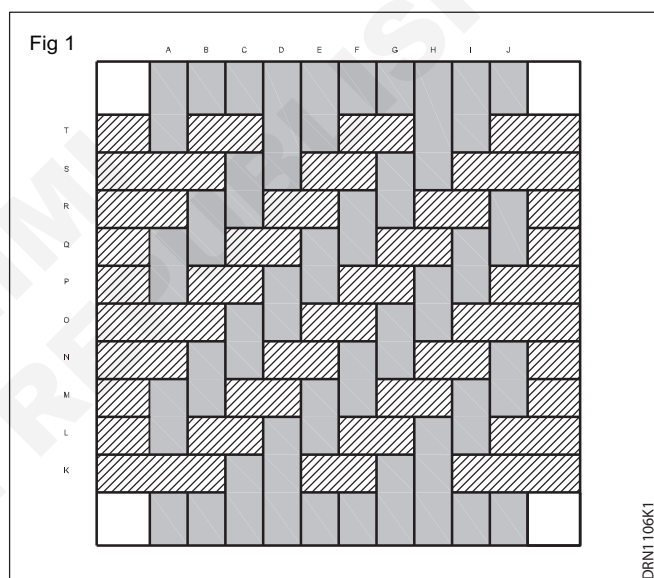
- Stick the left end of the tape to the wrong side of the card board with the help of glue.
- Interlace the tape into the warp sheet as shown in the Fig 2.
- Stick the right end of balance tape (1.5 cm) at the wrong side of the card board.
- Cut 18cm of cotton tape from contrasting colour and place on the row L on the card board.
- Stick the left end of the tape to the wrong side of the card board with the help of glue.
- Interlace the tape into the warp sheet as shown in the Fig 3.

- 9 Stick the right end of balance to the (1.5 cm) at the wrong side of the card board.
- 10 Do the above procedure for the rows M to T as shown in the Fig 4.



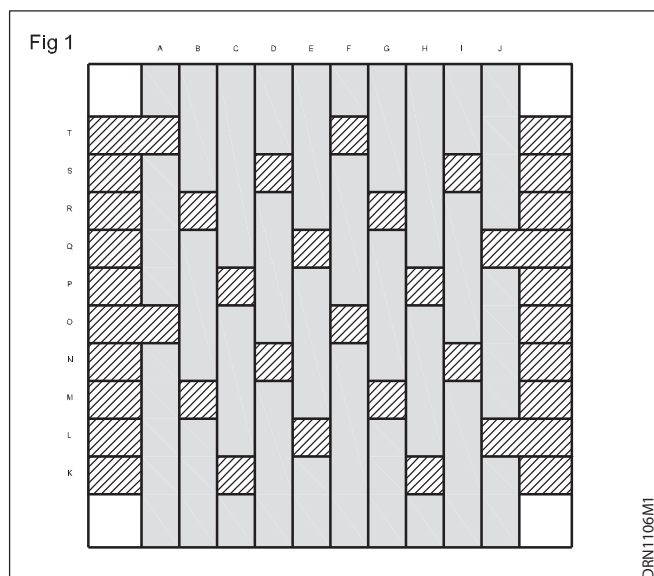
TASK 3: Make twill weave sample

- 1 Take a wrap sample
- 2 Cut 18 cms of cotton tape from contrasting colour and place on row K.
- 3 After sticking the left end of the tape interlace it as shown in the Fig 1.
- 4 Continue for other rows also by following (Fig 1).



TASK 4: Make satin weave sample

- 1 Take a wrap sample
- 2 Cut 18 cms of cotton tape from contrasting colour and place on row K.
- 3 After sticking the left end of the tape interlace it as shown in the Fig 1.
- 4 Continue for other rows also by following Fig 1.



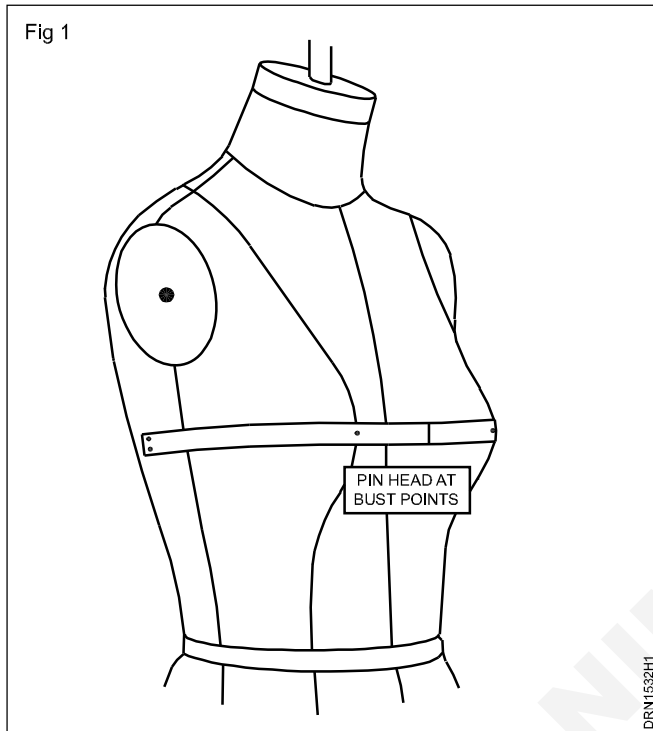
Measurements on dummy

Objectives: At the end of this exercise you shall be able to

- take measurements from dummy.

TASK 1 : Prepare the form for measuring

Bust bridge (Fig 1)



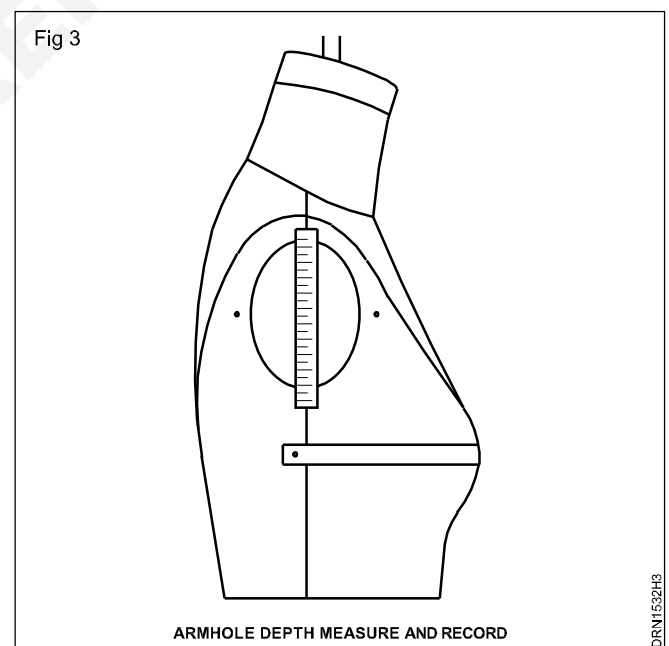
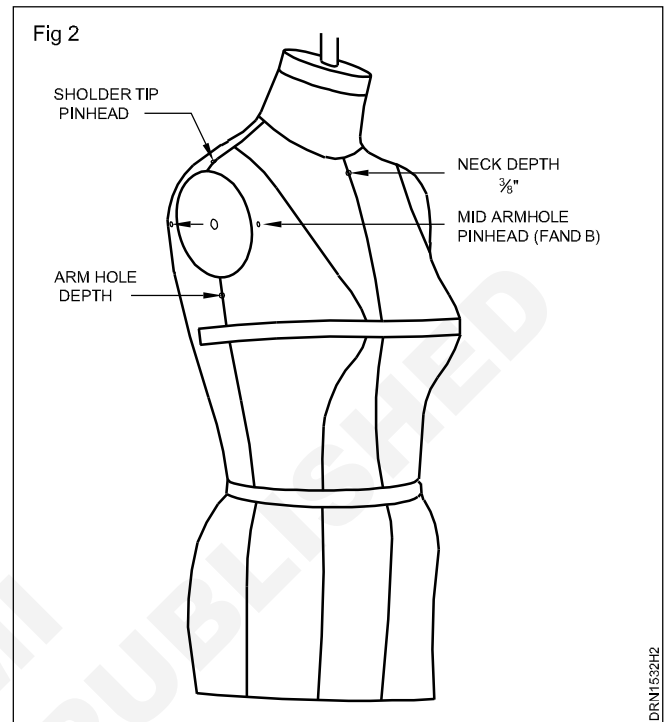
- 1 Cut a strip of cloth 1.5"x26".
- 2 Fold the edges to centre, and fold again.
- 3 Place across bust points, ending 1" past the side seam.
- 4 Push pins through bust points.
- 5 Mark the centre line.
- 6 Replace waist line tape, if the tape is damaged.

Pin head guides (Fig 2)

- 7 Thrust pins through shoulder tip at the ridge, or roll line, mid-armhole at level with the plate screw, and 3/8" below the centre neck.

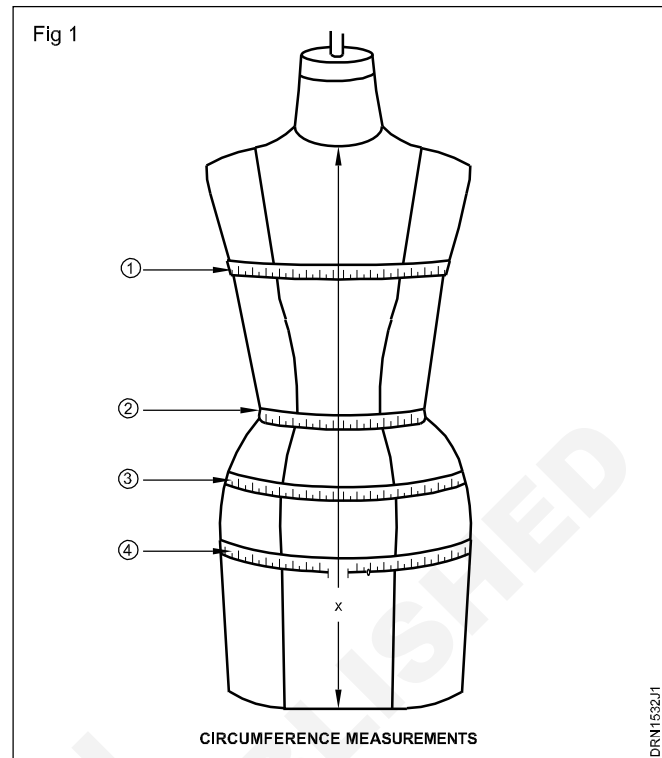
Armhole depth chart (Fig 3)

- 8 To locate the armhole depth of the form, choose the measurement that corresponds to the form size.
- 9 Measure down from armhole plate at the side seam, and thrust a pin head at the point.



TASK 2 : Take circumference measurements (Fig 4)

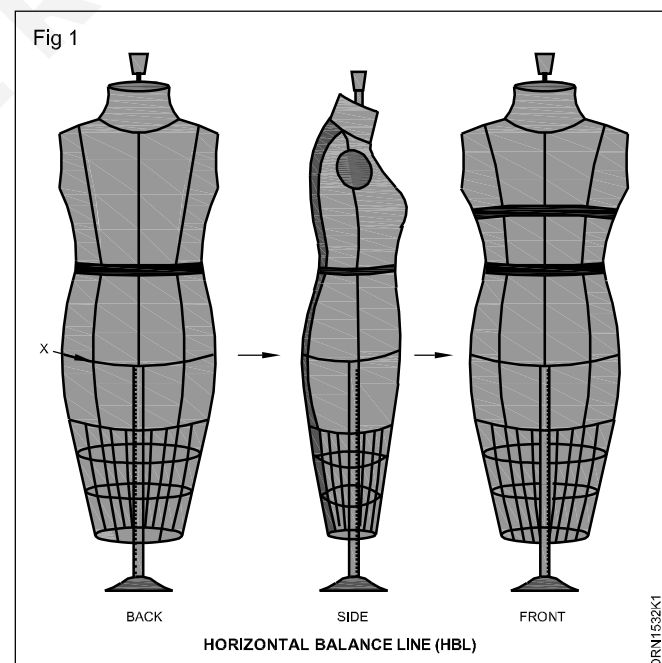
- 1 **Bust (1)** : Measure across the bust points and back.
- 2 **Waist (2)** : Measure around the waist.
- 3 **Abdomen (3)**: Mark 3" below the waist line and measure around the marked portion using a measuring tape.
- 4 **Hip (4)**: Measure widest area with tape parallel to the floor. Pin to mark hip level at centre front which is referred as x in the figure.



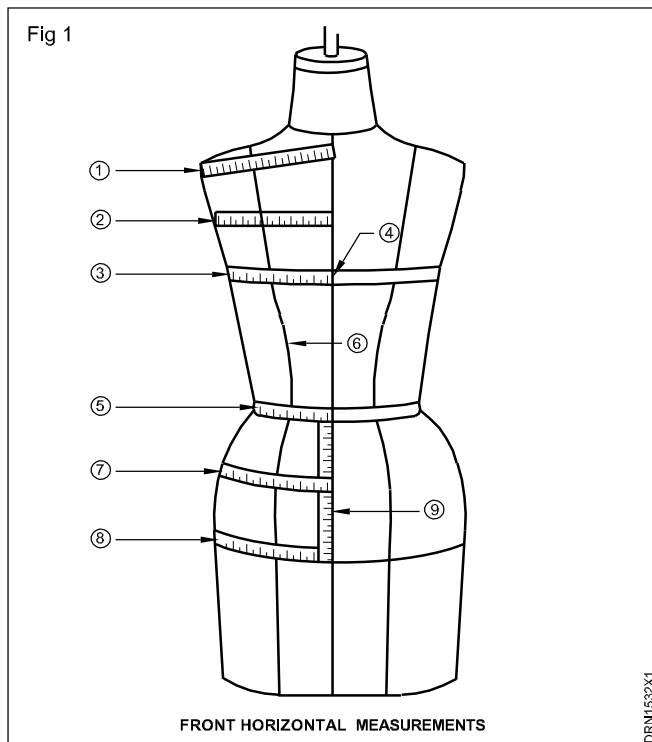
TASK 3 : Take horizontal balance line (HBL)

- 1 Measure from the floor to the pin mark (x) as centre front. (Fig 1)
- 2 Use this measure to measure up from the floor and pin mark centre back and side seams. Recheck the taken measurements. (Fig 1&2)
- 3 Draw a line around the hip touching each of the pin marks, or place elastic around the hipline.
- 4 Pin elastic at each pinhead location.

The standard hip depth is 6 to 7 inches down from the centre front waist for juniors and petites, and 8 to 9 inches down for missy size.



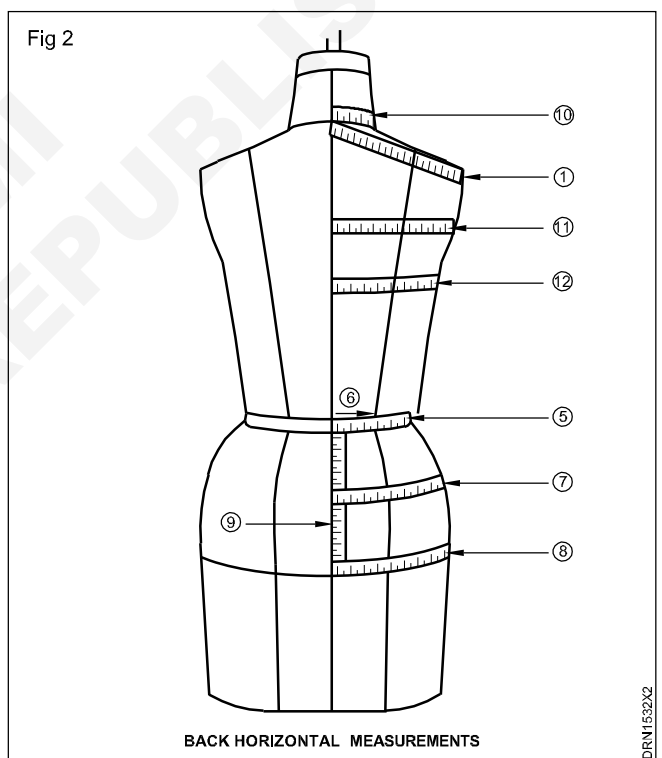
TASK 4 : Take horizontal measurements (Fig 1)



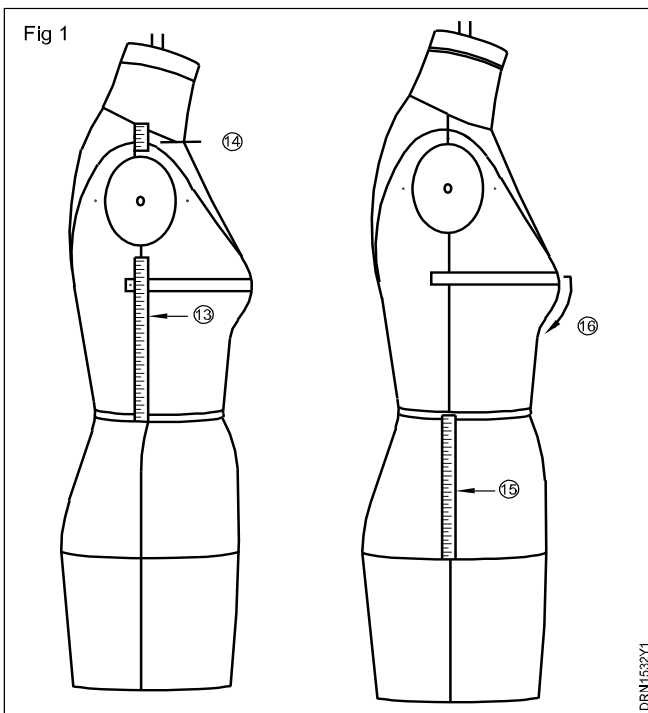
Front

- 1 **Across shoulder (1)** Measure from shoulder tip centre front neck.
- 2 **Across chest (2)**: Measure from centre front to 1' above the mid-armhole (pin marked).
- 3 **Bust Arc (3)**: Measure from centre front, over bust point, ending 2" below arm plate at side seam.
- 4 **But span (4)**: Place tape across bust points, divide in half for measurement.
- 5 **Waist arc (5)**: Measure from centre front waist to side waist seam.
- 6 **Dart placement (6)** : Measure from centre front to side front (princess line).
- 7 **Abdomen arc (7)**: Measure from centre front to side seam, starting 3" down from waist.
- 8 **Hip arc (8)**: Measure from centre front to side seam on HBL line.
- 9 **Hip depth (9)**: Measure from centre front to HBL line.
- 10 **Back neck (10)**: Measure from centre back neck to shoulder at neck.

- 11 **Across shoulder (1)**: Measure from shoulder tip to centre back neck.
- 12 **Across back (11)**: Measure from centre back to 1" above the mid-armhole at ridge of pin head.
- 13 **Back arc (12)**: Measure from centre back to bottom of arm plate.
- 14 **Waist arc (5)** : Measure from centre back waist to side waist seam.
- 15 **Dart placement (6)**: Measure from centre back waist to side back (princess line).
- 16 **Abdomen arc (7)**: Measure from centre back to side seam, starting 3" down from waist.
- 17 **Hip arc (8)**: Measure from centre back to side seam on HBL line.
- 18 **Hip depth (9)** : Measure from centre back waist to HBL Line. (Fig 2)



TASK 5 : Take Vertical measurements (Fig 1)

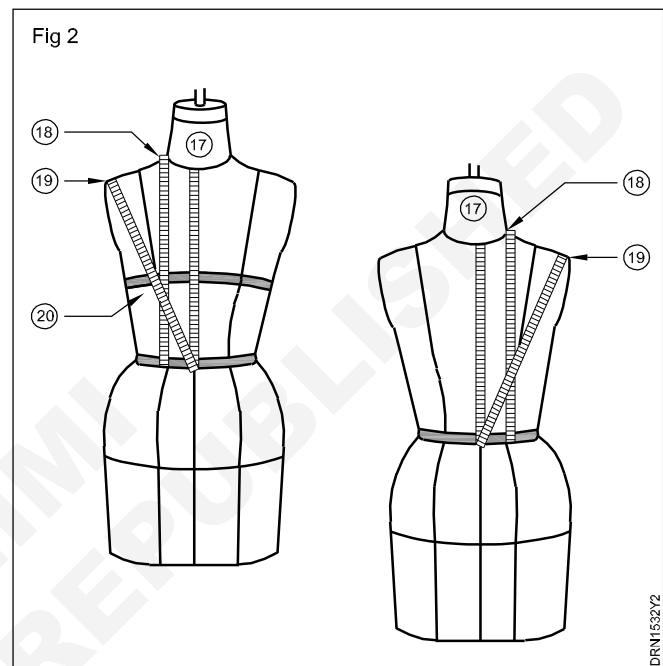


Side view

- 1 **Side length (13):** Pin mark below the arm plate at side seam to side waist.
- 2 **Shoulder length (14):** Measure from shoulder tip to neck.
- 3 **Side hip depth (15):** Measure from side waist to HBL, on side of form being measured.
- 4 **Bust radius (16):** Measure from bust point ending under bust mound.

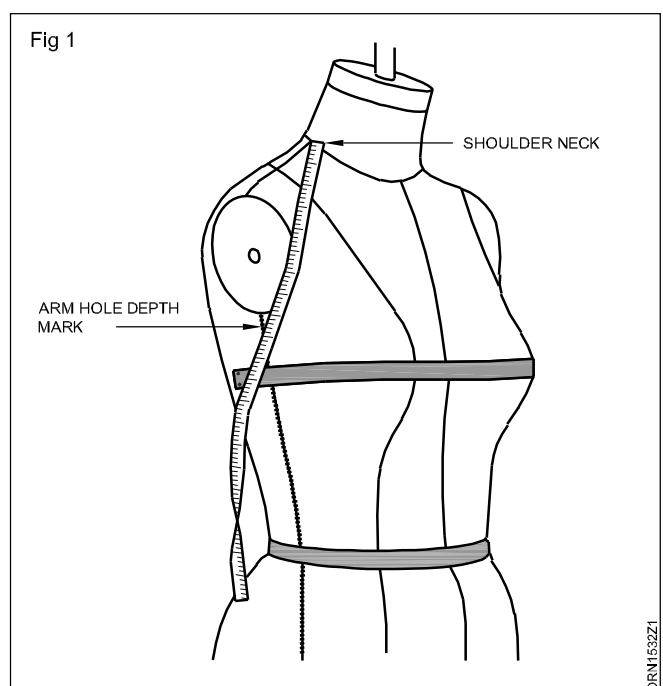
Front & Back (Fig 2)

- 5 **Centre length (17):** Measure from neck to waist (over bust bridge).
- 6 **Full length (18):** Measure from waist to shoulder at neck, Parallel with centre lines.
- 7 **Shoulder slope (19):** Measure from centre line at waist to shoulder tip (pin head mark).
- 8 **Bust depth (20):** Measure from shoulder tip to bust point and bust radius.



TASK 6 : Take strap measurements (Fig 1)

- 1 **Strap front:** Place metal tip of measuring tape at shoulder/neck, and measure down to pinhead mark below armhole plate. Take measurement on the same side of the tape from neck to armhole.



Market survey

Objectives: At the end of this lesson you shall be able to

- **how to market survey of different fabrics and materials.**

Market survey: An investigation into the state of the market for a particular product or service, including an analysis of consumers need and preferences.

A study of various customer capabilities such as investment attributes and buying potential. Market surveys are tools to directly collect feedback from the target audience to understand their characteristics, expectations, and requirements.

1 Purpose of market survey

Gain critical customer feedback: The main purpose of the market survey is to offer marketing and business managers a platform to obtain critical information about their consumers so that existing customers can be retained and new ones can be got on-board.

Understand customer inclination towards purchasing products: Details such as whether the customers will spend a certain amount of money for their products/services, inclination levels among customers about upcoming features or products, what are their thoughts about the competitor products etc.

Enhance existing products and services: A market survey can also be implemented with the purpose of improving existing products, analyse customer satisfactions levels along with getting data about their perception of the market and build a buyer persona using information from existing clientele database.

Make well-informed business decisions: Data gathered using market surveys is instrumental in making major changes in the business which reduces the degree of risks involved in taking important business decisions.

2 Benefits of market survey

To understand the different types of fabrics its characteristics cut and uses by sewing, sealing and collecting information from outside places like textile shape stitching shop. Etc... Go to a shape racing different variety of fabrics (like cotton, polyester, silk etc...) select few dress samples from there in all varieties like used for dress materials, salwars, saris, shirt materials pant/trousers etc. (all fabric only) The name of fabric (cotton, printed fabric). The cost of it and how widely its accepted in the market (Rs40/meters widely used) you try to identify if its dyed, printed, plain or embroidered. The colours of the fabric (Example white fabric, printed fabric – red flowers in white background) Try to identifiable. (Collect small sample, visit shops, tailor shops)

3 Types of market surveys: Multiple types of market surveys are used by enterprises to collect data depending on the objective of their market research. The information collected can be used to study various aspects of the market to address topics such as the right time to launch the product/service, to understand the trends in the market, to measure customer loyalty, to study their competitors and many more.

1 Market surveys for segmentation: An organization can spot existing and prospective customers and understand why the customers have chosen their products/service and the prospects have not yet made a purchase. This can lead to a structured market segmentation and analysis.

2 Market surveys for exploring various aspects of the target market: Get information about factors such as market size, demographic information such as age, gender, family income etc. to lay out a roadmap by considering growth rate of the market, positioning, and average market share.

3 Market surveys to probe into purchase procedure: How does a customer deciding on making a purchase? What are the factors that convert product awareness into sales? This type of market survey will unveil awareness, information, free trial, purchase, and repeat.

4 Market surveys to establish buyer persona: These surveys are to build a buyer persona by knowing about customer preference, inclination, and capabilities of purchasing a product.

5 Market surveys to measure customer loyalty: What is the degree of loyalty that the customers have towards and organization? The answer to this question can be obtained by conducting a market survey.

6 Market surveys to analyse a new feature or concept: It is essential for an organization to include market-compliant features and concepts. By carrying out a market survey to understand which features to launch, will help all the teams involved in the feature development process to do that with proper research.

7 Market surveys for competitor analysis: Healthy competition is always good for an organization's progress. Market surveys done with the motive of competitor analysis will produce results about how does the target market weigh the organization's products/service in comparison to the others in the market.

8 Market surveys to understand the impact of sales activities: Sales activities are the backbone of an organization and it becomes crucial to keep track of these activities.

Market surveys for sales activities will produce a report of the impact of sales activities, whether their frequency needs to increase or any changes the audience think should be inculcated in the sales process.

9 Market surveys to assess prices for new products/services: Affordable of products also is an aspect that drives the market for organizations. Price ranges, product variants to cater multiple price ranges, target customers for each of the products etc.

10 Market surveys for evaluation of customer service: Good customer service can lead to enhanced satisfaction levels among customers. Factors such as time taken to resolve issues, the scope of improvement, best practices of customer service etc.

Swatch file

Objectives: At the end of this lesson you shall be able to

- analysis to swatch file.

Swatch file: A file with the ASE file extension is an adobe swatch exchange file used for saving a collection of colours accessed through the swatches palette of some adobe products like Photoshop. The format makes it easy to share colours between programs.

1 Organize fabric swatches: Once you've attached the swatches to a piece of paper, you can store them in a binder. You can either punch holes directly into the paper or you can use clear plastic sleeves to hold the pages and store everything in a binder. I prefer to use clear plastic sleeves.

2 Types of fabrics: There are two main types of fabrics: natural and synthetic.

Natural fabrics such as wool, cotton, silk, and linen are made from animal coats, cotton-plant seed pods, fibres from silkworms, and flax (fibre from the stalk of a plant), respectively.

Synthetic fabric: Fibres are fine filaments that either occurs naturally or can be synthesized. Synthetic fibres are man-made fibres produced from chemical substances and are used for making cloths and other useful things.

Synthetic fibres are of four types, namely

- Rayon • Nylon • Polyester • Acrylic

3 Swatch board: A swatch board contains fabrics, interior finishes, and swatches – pinned together to create an inspiration guide as you finalize the look of your home. This tool is often used by designers so they can explain – through visuals – the plans for the interiors.

Trim board: Material which is used in the sewing room other than the fabric to make a garment, are trims. They are directly attached to the fabric to make garments. Trims can be threads, button, lining, beads, zippers, motifs, patches etc. They add a style quotient to the overall look of the wearer.

	Rayon	
	Nylon	
	Polyester	
	Polyester	

Apparel

Dress Making - Textile and Hand Work Basic Operations

Exercise 1.1.10

Practice on industrial single needle lock stitch machine sitting posture



Scan the QR Code to view the video for this exercise

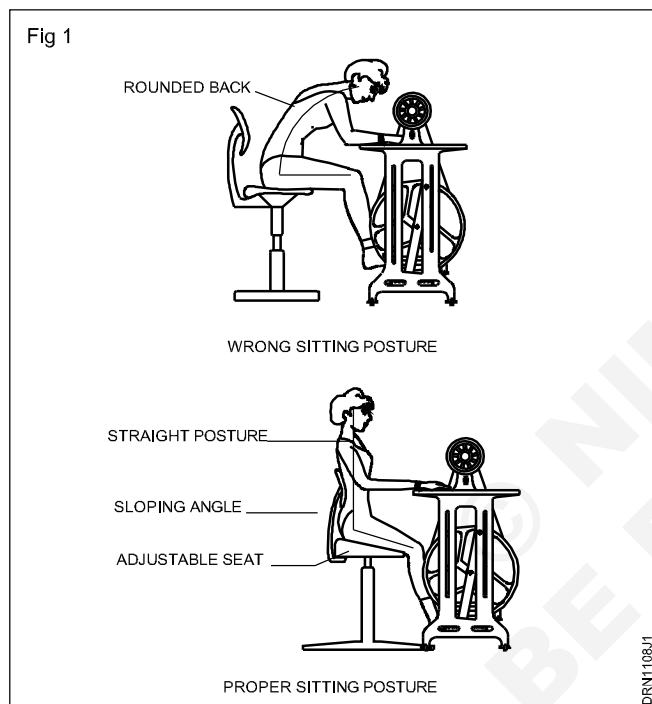
Objectives: At the end of this exercise you shall be able to

- take the correct sitting position.

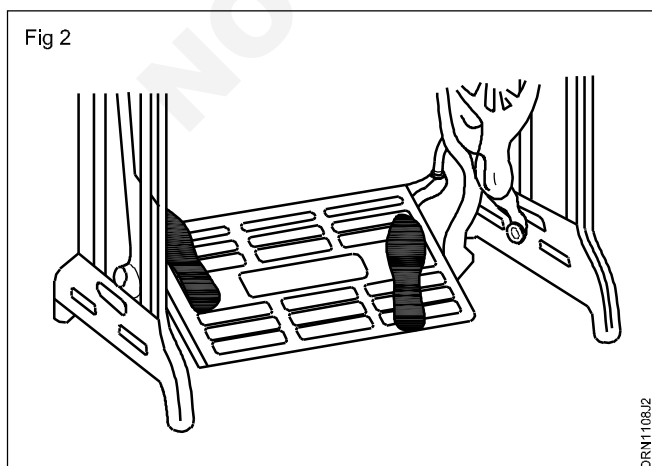
PROCEDURE

Horizontal balance line (HBL) (Fig 1)

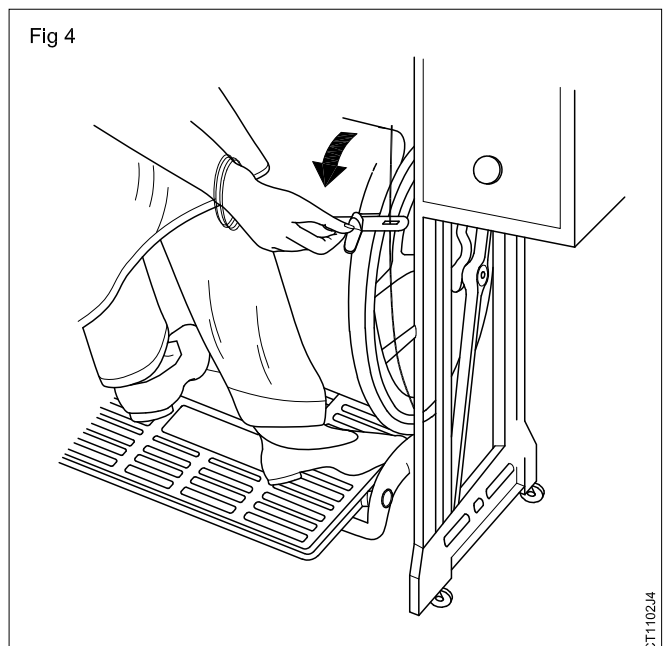
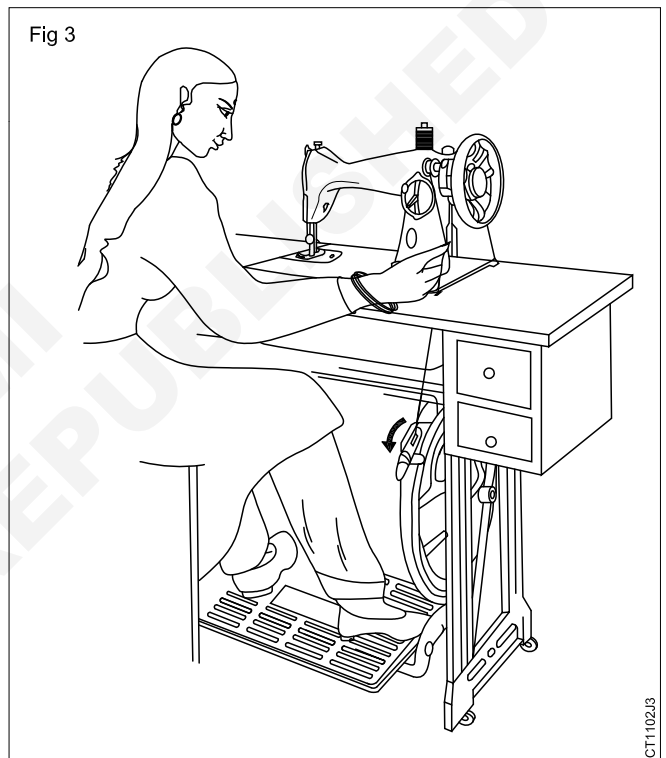
- 1 Take the correct sitting position while work on sewing machine (Fig 1)



- 2 While stitching on machine light (window) should face you from the left side. Height of the Stool / Chair should be according to the body height, (i.e), while stitching the upper body should not be bended. Don't sit on the edge but on the middle of the seat. Take care that your clothes don't touch the machine. (Fig 2)



- 3 Set the belt on fly wheel and thread less wheel. (Figs 3 & 4)



Speed control

Objectives: At the end of this exercise you shall be able to

- identify the major parts of single needle lock stitch machine and their uses
- practice on sitting posture and to fix the needle.

Requirements

Tools/Instruments

- | | | | |
|-------------------------------------|---------|-----------------------|---------|
| • Single needle lock stitch machine | - 1 No. | • Overlock machine | - 1 No. |
| • Double needle lock stitch machine | - 1 No. | • Button hole machine | -1 No. |

PROCEDURE

TASK 1: Identify the major parts of single needle lock stitch machine and their functions

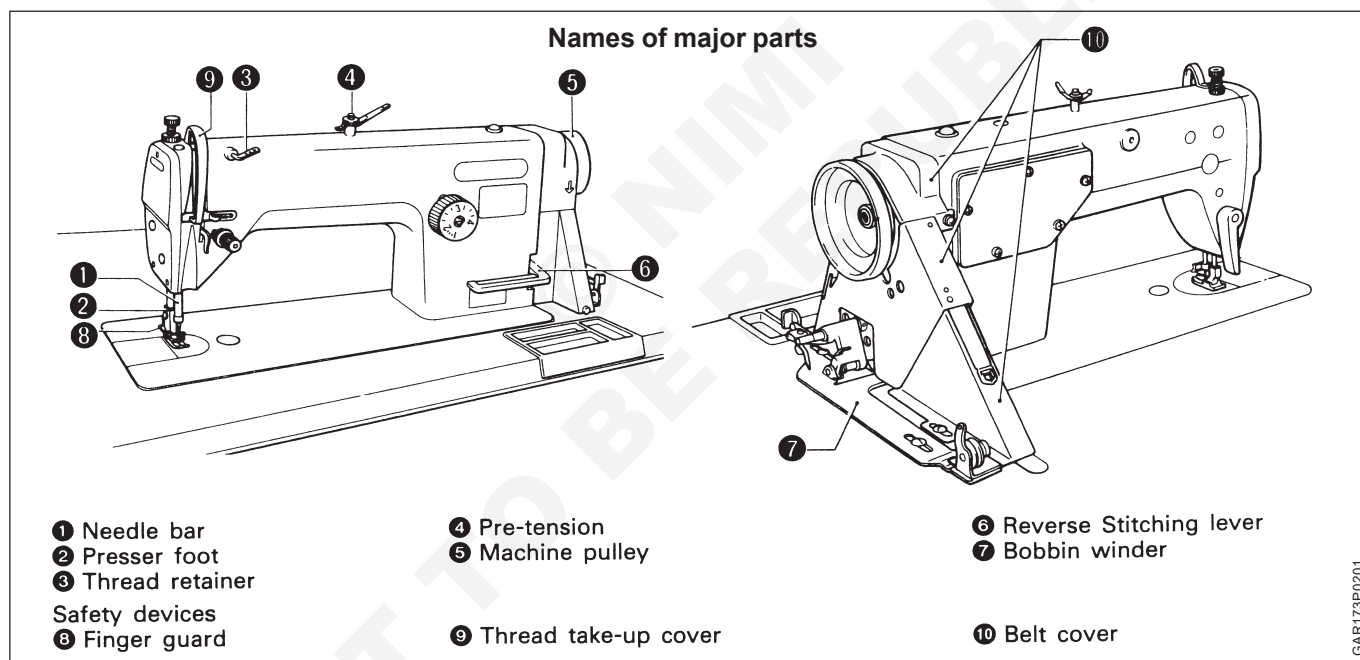
Needle bar

- 1 Needle bar holds the needle at one end with the help of a screw
- 2 It is a moving part to form stitches with the needle

- 3 Its main function is to give the needle its motion.

Presserfoot

It is a shoe shaped component fixed to the bar to hold the cloth while sewing.



a Thread retainer

It is small hook through which thread runs directly to the needle in a vertical direction.

b Pre-tension

It is used to make threading easier and also prevent the thread from coming out at the sewing start position.

c Mechanic pulley

It is a rotating part to connected with main shaft and motor with the help of belt.

d Reverse stitching lever

It is used to stitch the fabric in reverse direction (for rubbing).

e Bobbin winder

It winds the thread several times around the bobbin and thread should be wound evenly on to the bobbin if not there may be trouble in stitching or unevenness in stitch tension.

f Finger guard

It is safe guard to prevent the finger going under the needle.

g Thread take up lever cover

It avoids the accident during sewing the window glass is placed in a machine.

h Belt cover

To prevent the accident during sewing, the belt has cover.

Practice on paper

Objective: At the end of this exercise you shall be able to

- make different types of shapes using paper

Requirements			
Tools/Instruments			
• Single needle lock stitch machine - 1 No.		• Pencil	- 1 No.
		• Scale	- 1 No.
		• Eraser	- 1 No.
Equipment/Machines		Materials	
• Bobbin, Bobbin case	- 1 No.	• A4 sheet	- 10 Nos.
• Needle	- 1 No.		
• Thread	- 1 No.		

PROCEDURE

- 1 Take the paper and draw lines 1 cm apart under each other.
- 2 Start the machine and lift the presser foot lifter and place the paper under it.
- 3 Place both hands on the paper and begin to gently pedal carefully.
- 4 Monitor the movements of the needle and paper and the speed of the machine.
- 5 Repeat this exercise until you have finished sewing all the lines.
- 6 To sew angle curves, lower the pressure foot so that the needle is inside the paper and sew with horizontal lines.
- 7 Practice stitching at the vertically curved edges and stopping the time lines and turning the paper.
- 8 By training in this way, mistakes and irregular stitches that occur when sewing clothes can be prevented.

Threading of machine bobbin winding and loading

Objectives: At the end of this exercise you shall be able to

- threadle the lower thread and upper thread
- wind the bobbin with lower thread
- remove the bobbin from bobbin case
- insert the needle with needle bar
- adjust the stitch length, thread tension and presser foot pressure.



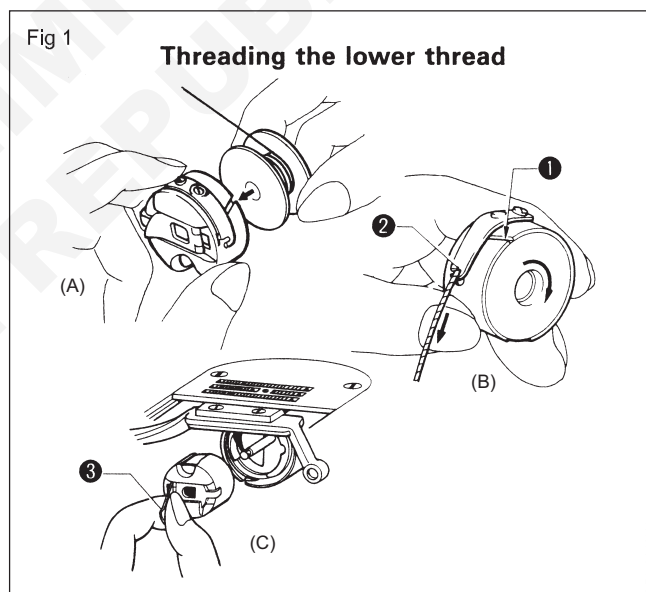
Scan the QR Code to view
the video for this exercise

Requirements			
Tools/Instruments		Equipment/Machines	
• Bobbin & bobbin case	- 1 No.	• Single needle lock stitch machine	- 1 No.
• Thread & needle each	- 1 No.		
• Measuring tape	- 1 No.		

PROCEDURE

TASK 1: Threading the lower thread to the bobbin insert it into the bobbin case

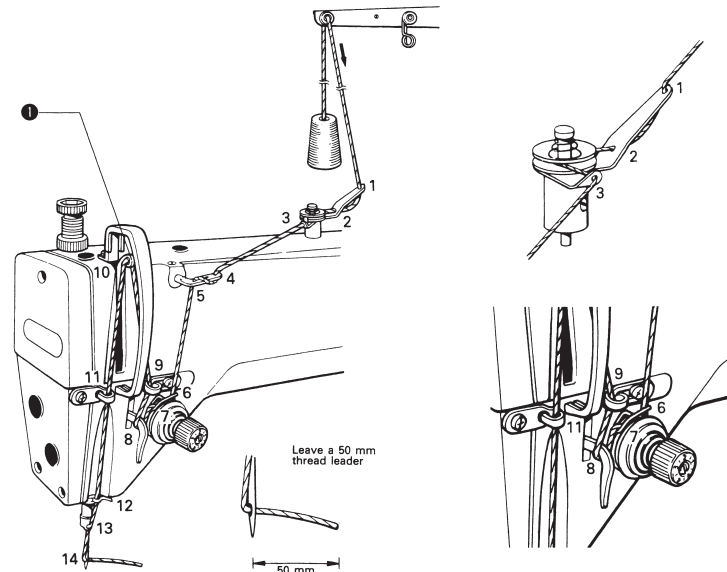
- 1 Hold the bobbin towards left hand, so that the thread winds to the right.
- 2 Insert the bobbin into the bobbin case. (Fig 1)
- 3 Pass the thread through the slot as shown Fig 1a and under the tension spring has shown in Fig 1b.
- 4 Pull the thread out through the hole in the end of the tension spring
- 5 Check that the bobbin turns clockwise when the thread is pulled
- 6 Hold the latch on the bobbin case into the rotary hook.(Fig 1c)



TASK 2 : Threading the upper thread to the machine

- 1 Before threading the upper thread. Raise the thread take up lever. (Fig 1)
- 2 This will make threading easier and it will prevent the thread from coming out while sewing
- 3 Thread the machine as shown in Fig.2 according to the points mentioned in it.

Fig 1

Threading the upper thread

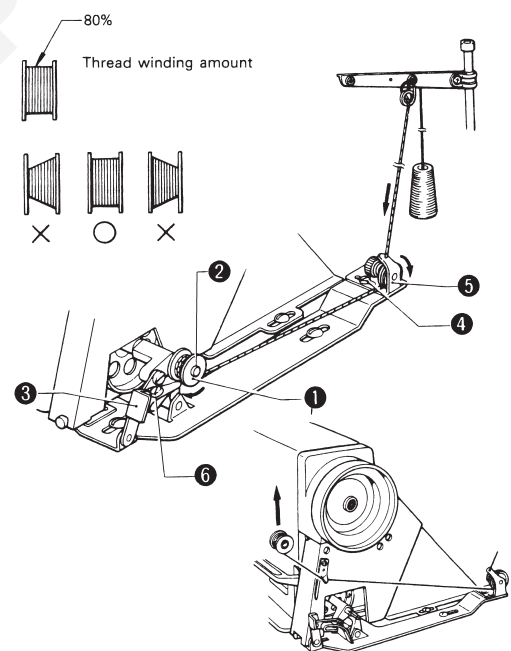
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TASK 3 : Wind the lower thread to the bobbin

- 1 Turn on the power switch
- 2 Place the bobbin onto the bobbin winder shaft
- 3 Push down the bobbin presser arm as far as it will go. (Fig 1)
- 4 Wind the thread several times around the bobbin in the direction indicated by the arrow.
- 5 Depress the treadle, lower thread winding will then start.
- 6 Winding of the lower thread is completed, remove the bobbin and trim the thread. (Fig 1)
- 7 Loosen the screw, if the thread can not be wound on evenly, move the bobbin winder guide to left or right.
- 8 Tighten the adjusting screw to wind more thread onto the bottom.

The amount of thread wound onto the bobbin should be maximum of 80% of the bobbin capacity.

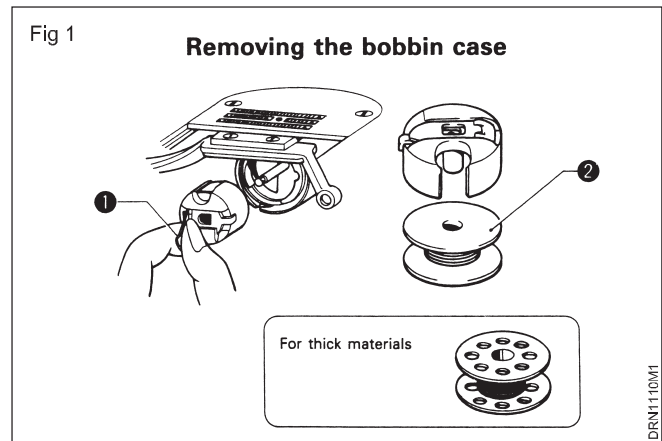
Fig 1

Winding the lower thread

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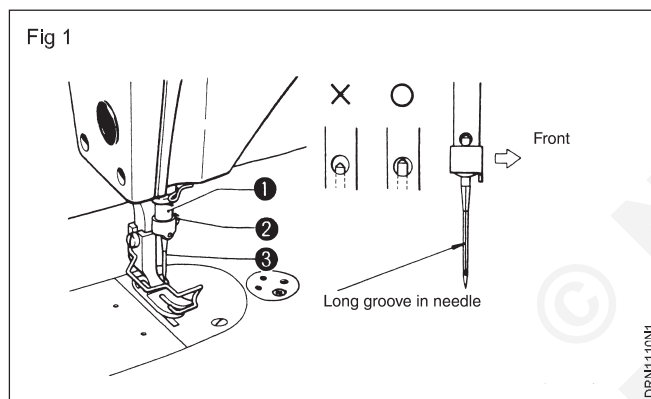
TASK 4 : Remove the bobbin from bobbin case

- 1 Turn the machine pulley to raise the needle until it is above the needle plate
- 2 Pull the latch of the bobbin case upward and then remove the bobbin case. (Fig 1)
- 3 The bobbin will come out when the latch is released.



TASK 5 : Insert the needle with needle bar

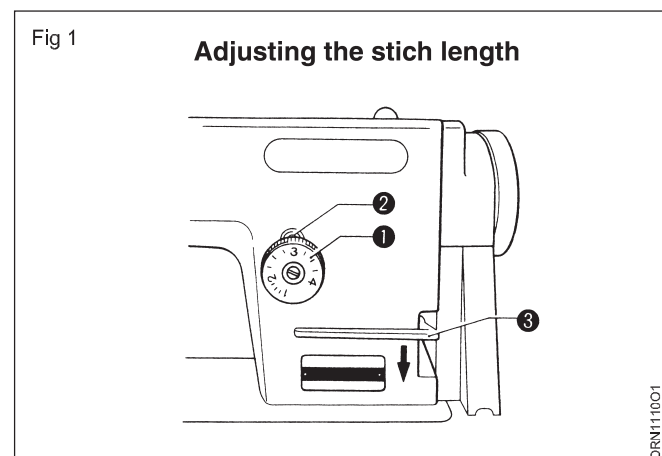
- 1 Turn machine pulley to move the needle bar to its highest position. (Fig 1 : Pt : 1)



- 2 Loosen the screw. (Fig 1: Pt : 2)
- 3 Insert the needs as shown in Fig 5: Pt : 3 in a straight line as far as it will go.
- 4 Make sure that the long groove on the needle is at left and then securely tighten the screw.

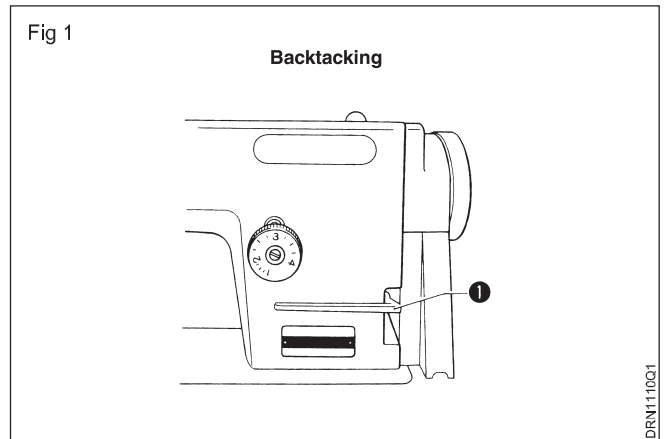
TASK 6: Adjust the stitch length

- 1 Turn the stitch length dial (Fig 1a) until the desired stitch length number is aligned with the pin above the dial (Fig 1b)
- 2 The longer the stitch length will be the larger the number to be set in the stitch length dial
- 3 When turning the stitch length dial from larger setting to a smaller setting, it will be easier to turn the dial if the reverse stitching lever is pushed to the halfway down position.



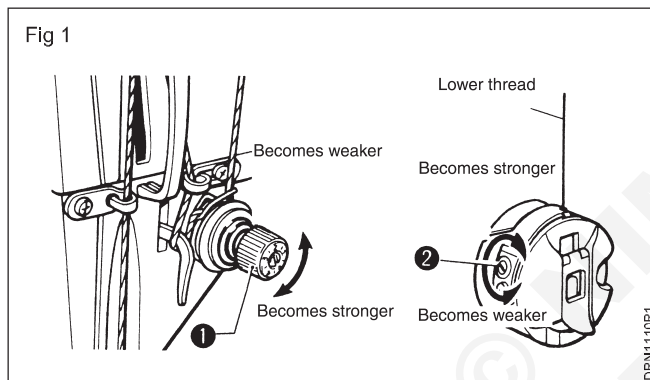
TASK 7 : Reverse stitching lever

- 1 When the reverse stitching lever is pushed, the cloth feed direction will be reversed.
- 2 When it is returned to its original position, the feed direction will change back to normal. (Fig 1)



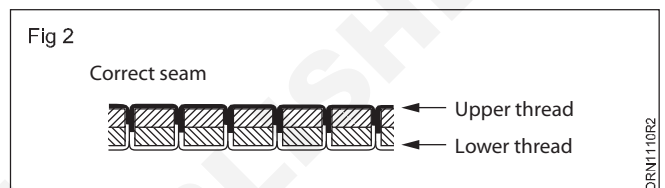
TASK 8 : Adjust the thread tension

- 1 Upper thread tension: After lowering the presser foot, turn the adjustment screw to adjust the thread tension (Fig 1)

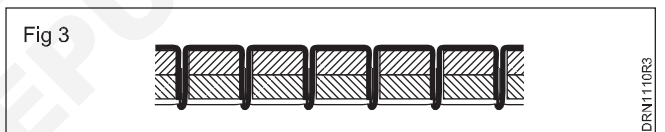


- 2 Lower thread tension: Thread tension nut is adjust by turning the bobbin case until it will not drop by its own weight. While the thread end coming out of the bobbin case in hold.

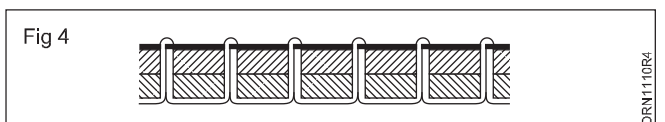
- 3 Correct seam as shown in Fig 2



- 4 Appearance of seam when upper tension is too weak. (Fig 3)

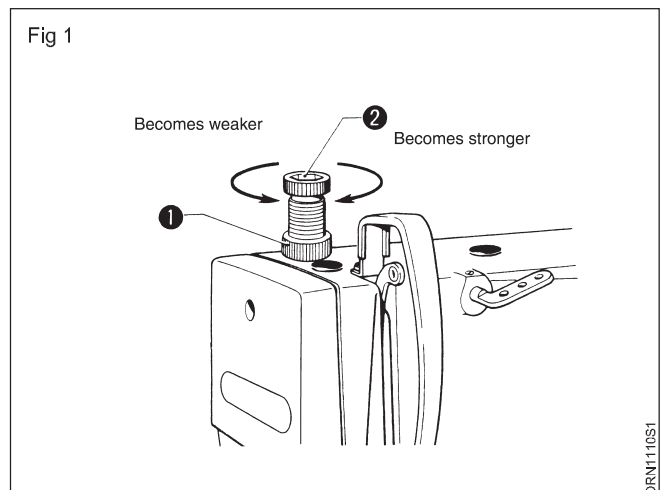


- 5 Appearance of seam when upper thread tension is too strong. (Fig 4)

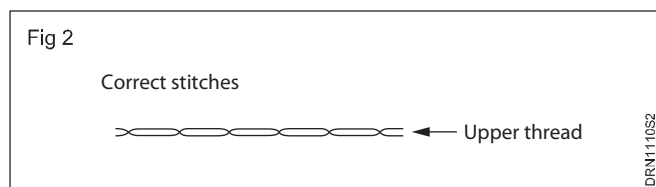


TASK 9: Adjust the pressure foot pressure

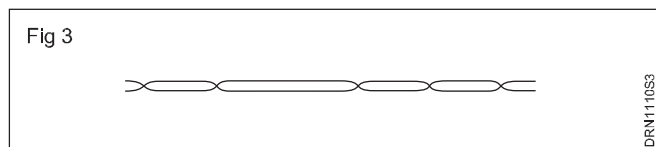
- 1 Loosen the adjustment nut as shown in Fig 1 : Pt : 1
- 2 Turn the adjustment screw its adjust the presser foot pressure as shown in (Fig 1)
- 3 The presser foot pressure should be as weak as possible, but strong enough to hold the material which does not slip.
- 4 Tighten the adjust nut as shown in Fig 1 : Pt : 1



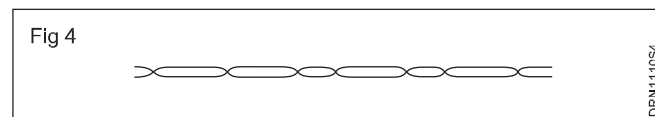
5 Correct stitches – upper thread. (Fig 2)



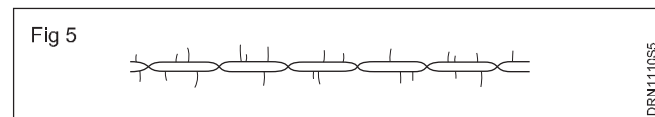
6 Skipped stitches occurs when the pressure is increased. (Fig 3)



7 Uneven stitch length – the pressure is increased. (Fig 4)



8 Stitches are puckered when the pressure is decreased. (Fig 5)



Practice on fabric

Objectives: At the end of this exercise you shall be able to

- practice on speed control of the lock stitch sewing machine
- perform stitch lines in different shape on paper and fabric.

Requirements			
Tools/Instruments		Materials	
• Bobbin & bobbin case	- 1 No.	• A4 size papers	- 10 Nos
• Thread & needle each	- 1 No.	• Cotton fabric (cambric/ poplin)	
• Measuring tape	- 1 No.	0.15m x 0.30m	- 1 No.
• Scale	- 1 No.		
• Pencil	- 1 No.		

PROCEDURE

TASK 1: Practice on speed control of the lock stitch sewing machine

- 1 Switch on the sewing machine.
- 2 Raise the process foot up
- 3 Take one paper and place it below the presser foot and down the presser foot with the help of Presser foot lifter.
- 4 Keep the both hands on paper. Concentrate and slightly press the pedal.
- 5 Note that the needle and paper the movement. Also note the speed of the machine.
- 6 Stop the machine by removing the foot from the pedal.
- 7 Practice the above procedure until to get the speed control.

TASK 2: Perform stitch lines in different shape on fabric

- 1 Draw lines on A4 paper
- 2 Draw each exercise twice on one sheet. Use Pencil and scale (Fig. 1)
- 3 Place the paper under the presser foot, Keeping excess material on the left side. While stitching on paper don't thread the needle.
- 4 Press down the presser foot lifter of sewing machine by right hand and fix the material under the presser foot. Keep the mark on material under the needle point under the presser foot.
- 5 Start moving the treadle, while you push the fly wheel of the machine by right hand towards yourself.
- 6 Continue the movement of the treadle with your feet. While stitching, control the material with both hands. With the movement of machine the feed-dog will automatically transport the material but you have to pay attention on the needle and presser foot to maintain the correct line of the stitches.

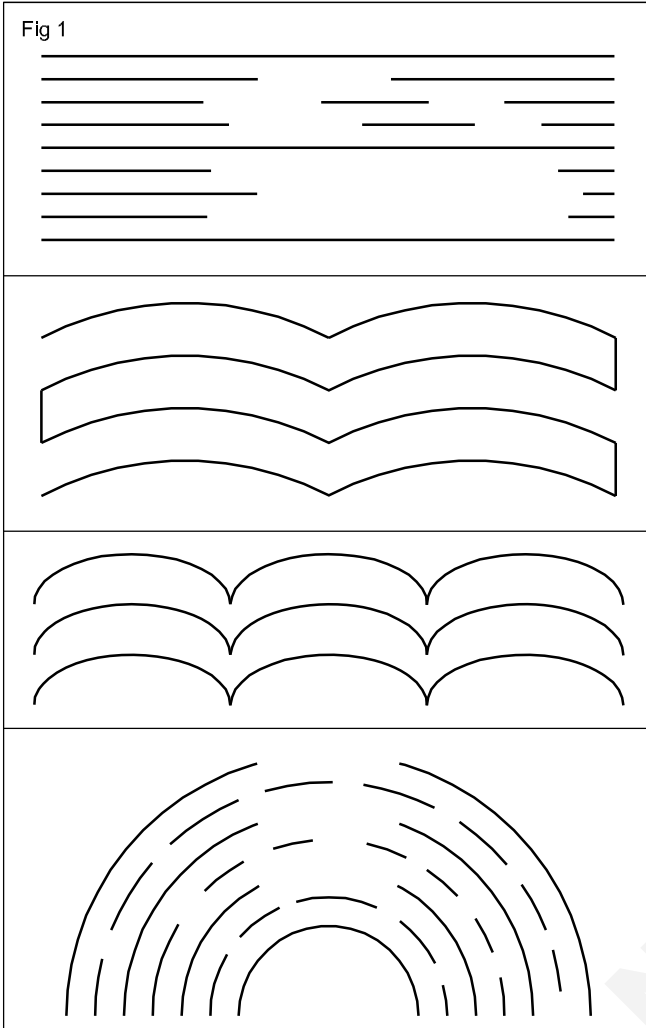
Keep full tension on the material and needle. Take care that your clothes are not caught in the treadle wheel of the machine. Save your fingers from needle while controlling the cloth as machine stitching is faster than hand stitching.

In the same way, practice on fabric with threading the needle and bobbin.

Now perform all the stitch lines once on double layered cloth of 20 x 22.5 cm. Cut the material for 7 sets (i.e. 14 pieces), put two pieces together above each other, bast and stitch all around leaving 0.5 cm from all edges. Take excess material (20 x 45 cm) to perform the straight stitch lines. While working on the curved stitches, insert brown sheet underneath the material.

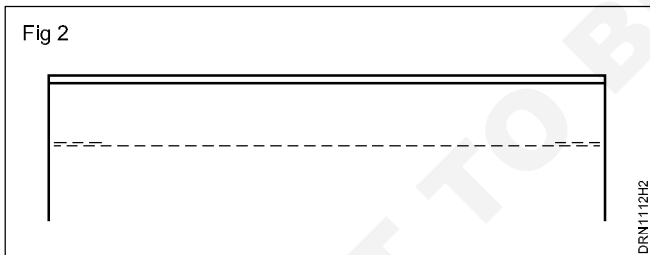
Before you start stitching check thread tension of upper and lower thread.

Fig 1



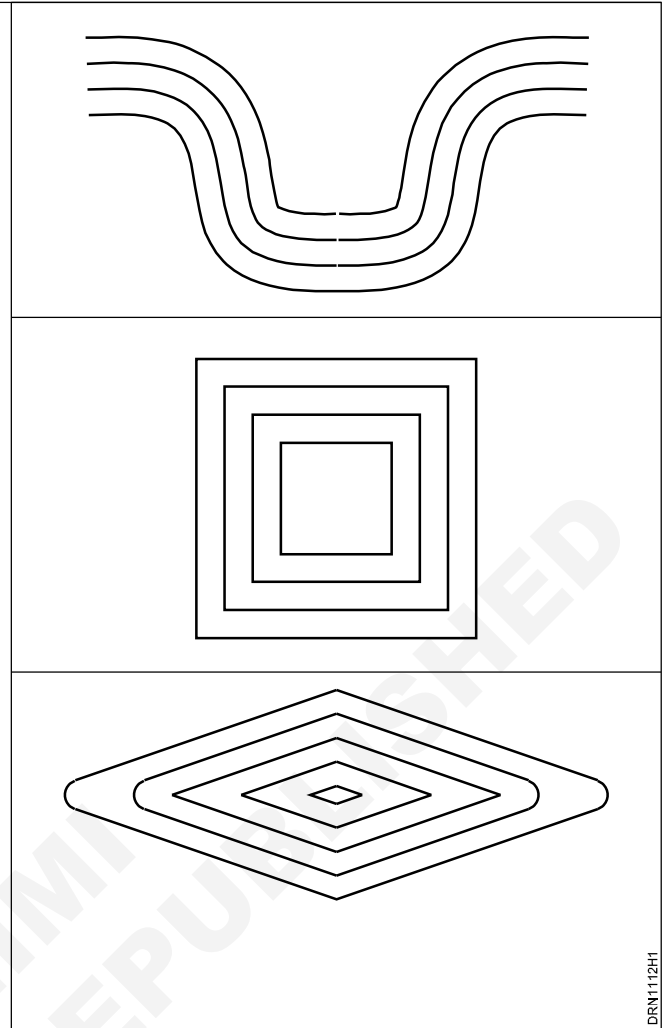
To secure threads at the end use reverse stitching mechanism. Place these back stitches over the previous stitch or just inside the previous stitch line. (Fig 2)

Fig 2



DRN112H2

Don't stitch beyond the cut edge of the fabric, otherwise the fabric might be pulled down into the needle plate hole.

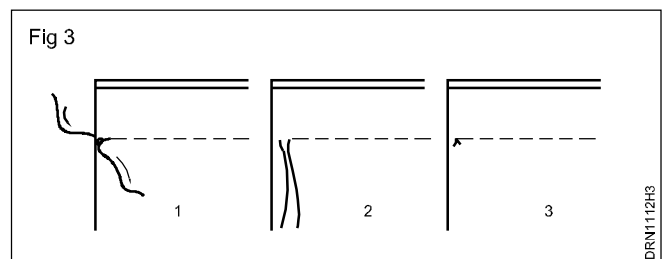


DRN112H1

You can also tie the thread ends. Therefore you first have to bring lower thread to the right side of the fabric.

Pull on the upper thread to catch the lower thread. Then pull it through completely. Tie threads together and trim away the excess threads. (Fig 3)

Fig 3



DRN112H3

Practice on over lock machine

Objectives: At the end of this exercise you shall be able to

- identify the parts of over lock machine components
- threaded the over lock machine and adjust the stitch length
- adjust the stitch length
- change differential feed mechanism.



Scan the QR Code to view
the video for this exercise

Requirements

Tools/Instruments

- Scissors - 1 No.
- Screwdriver - 1 No.
- Trimmer - 1 No.

Equipment/Machines

- Over lock machine - 1 No.

Materials

- Thread - as required
- Fabric - as required

PROCEDURE

TASK 1 : Identify the major parts of over lock machine (Fig 1)

1 Oil window glass

It is used to indicates the oil level in the oil tank

2 Balance wheel

On the balance wheel the stitch length specification is given.

3 Side plate

After threading the looper and during stitching ensure the plate to be closed completely.

4 Tension disc

For 5 thread over 2 needle thread tension disc and 2 looper tension is given.

5 Presser foot pressure hub

Based on the fabric the tension will be adjusted by using pressure foot nub.

6 Presser foot

Compensating pressure is given to hold the fabric and avoiding ply shift.

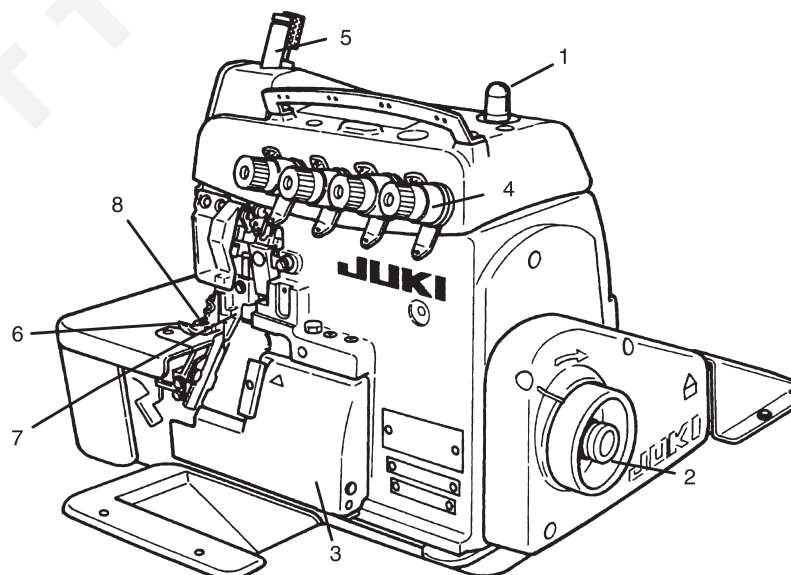
7 Feed dog

Differential feed dog is placed.

8 Knife

Adjacent the needle, the blade is placed to cut the raw edges then start the sewing process.

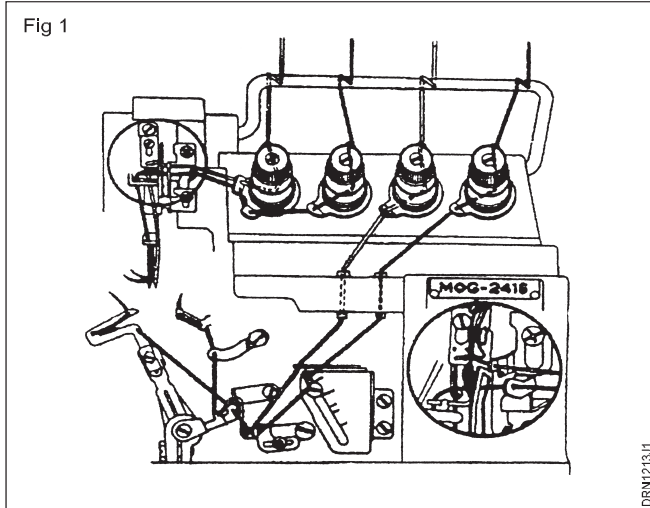
Fig 1



TASK 2 : Threading the overlock machine

- 1 Thread the over lock machine. (Fig 1)

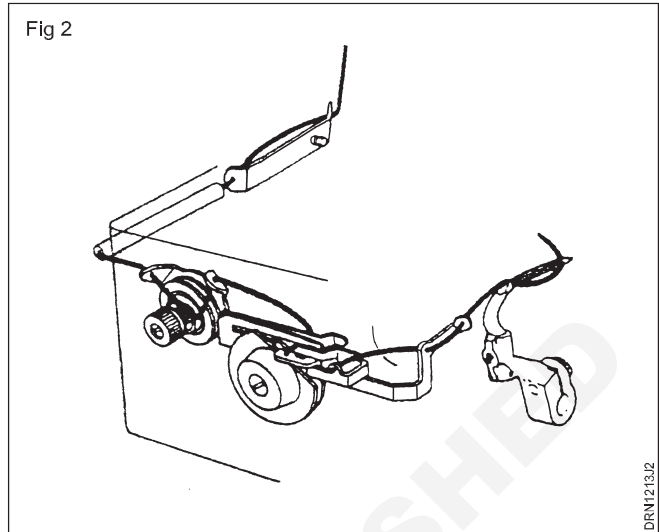
Fig 1



- 2 1st thread comes from the spool stand inserted into the 1st needle.
- 3 2nd thread for the second needle.

- 4 3rd thread from spool drawn to the back side looper. (Fig. 2)
- 5 4th and 5th thread for the lower assemble loopers.

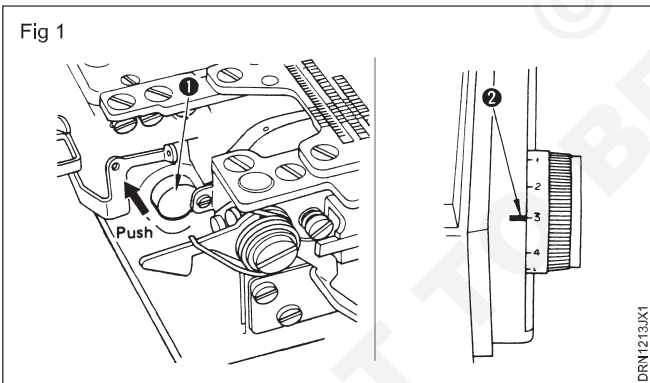
Fig 2



TASK 3 : Adjust the stitch length

- 1 Slowly turn the hand wheel as keep depressing push button will find a point at which the push button goes in further.
- 2 Maintain the above condition, align the desired scale mark on the hand wheel with the white mark on the belt cover.
- 3 Reset the push button after setting the dial. (Fig 1)

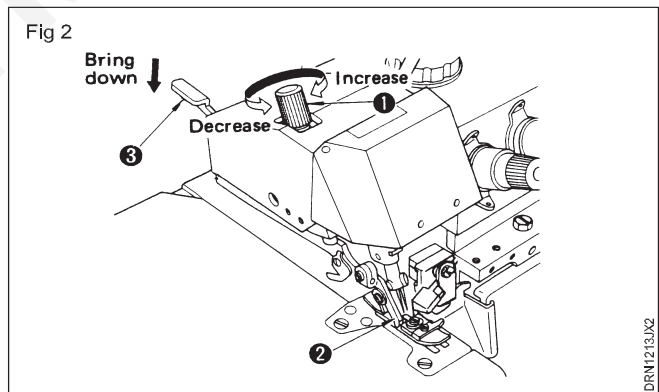
Fig 1



Presser foot pressure and lifter

- 4 Adjust the screw which is turned towards clock wise, the pressure increase when the screw is lined counter clockwise.
- 5 Side ways bring down presser lifting lever, whenever the presser foot is returned to its original position be sure to bring up the presser lifting lever as shown in the Fig 2.

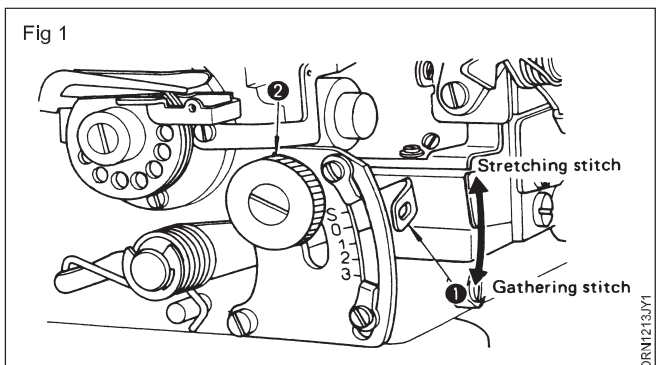
Fig 2



TASK 4 : Change the differential feed mechanism

- 1 Loosen differential feed lock nut . Move lever up for stretching as down form the gather stitch.
- 2 Position 'S' provides a differential feed ratio of 1 : 0, 64, while it provides 1 : 1 stitching stitch.
- 3 Gathering stitch can be set up to a differential feed ratio of 1 : 1 : 76 and up to 1 : 2 : 9 as shown in the (Fig 1)

Fig 1



Practice of making seams

Objective: At the end of this exercise you shall be able to

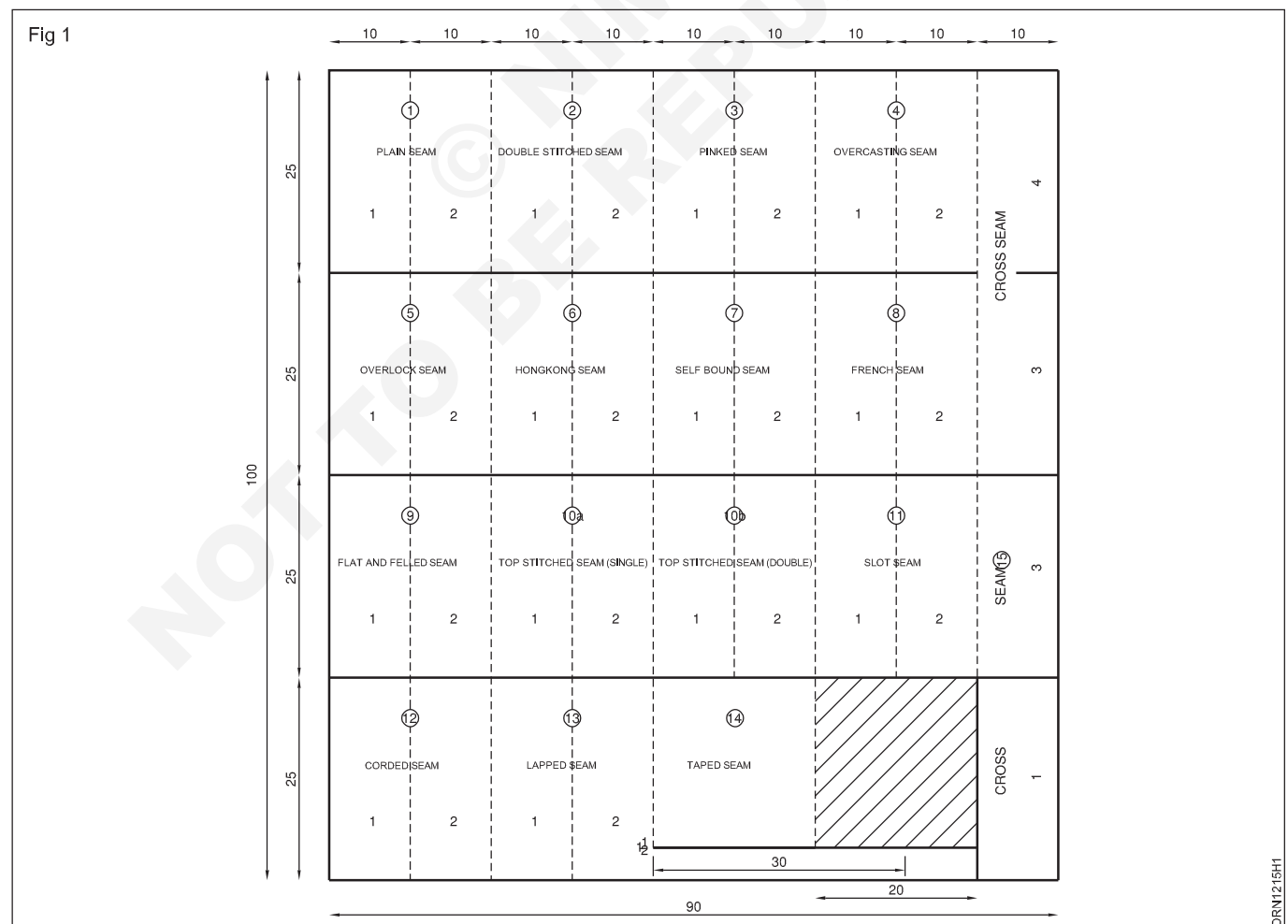
- prepare kinds of seam and seam finish.

Requirements			
Tools/Instruments		• Overlock machine	- 1 No.
• Pinking shears	- 1 No.	Materials	
• Hand needle	- 1 No.	• Long cloth	- 1 m x 0.90 m
• Scale	- 1 No.	• Cord	- 0.30 m
• Shears	- 1 No.	• Sewing thread	- 1 No.
Equipment/Machines		• Dress maker's	- 1 box
• Single needle Industrial lock stitch machine	- 1 No.		

PROCEDURE

Prepare different kinds of seam and seam finish

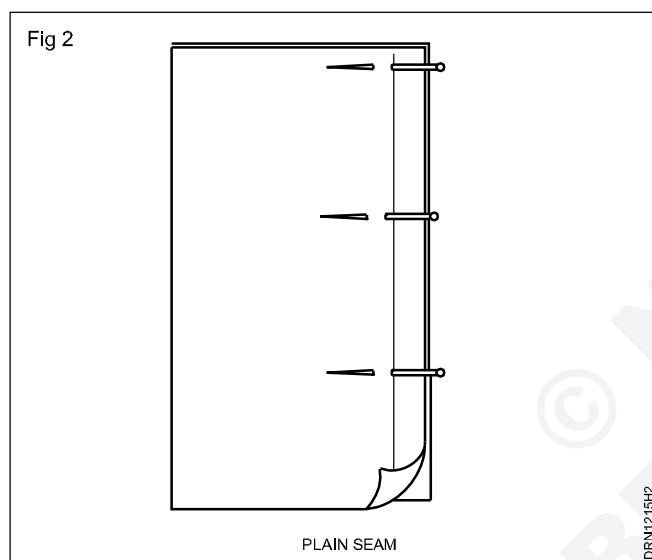
- 1 Mark and cut the pieces for different samples of seams and seam finish from the given material. All pieces are of the size 25 x 10 cm; except the piece for taped seam (20 x 20 cm); refer to layout. (Fig 1)



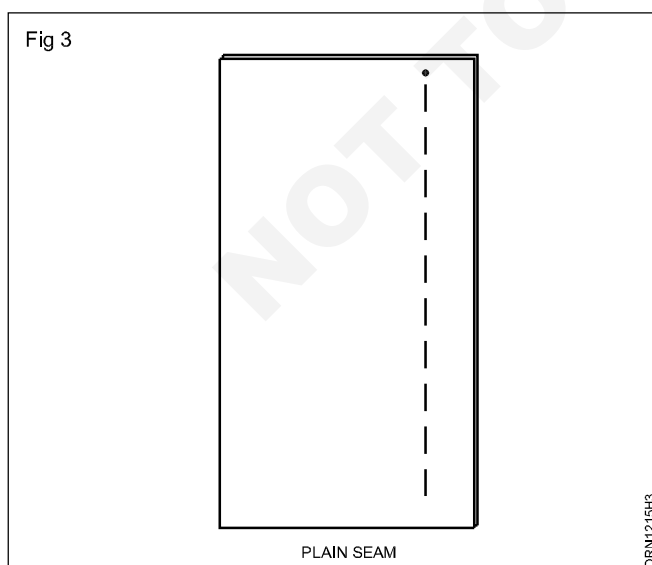
Stitch the seams and seam finish in the sequence given below:

- Plain seam (pressed open)
- Pinked seam
- Overlock seam
- Self bound seam
- Flat and felled seam
- Slot seam
- Lapped seam
- Cross seam
- Double stitched seam
- Overcasting seam
- Hong kong
- French seam
- Top stitched seam (single and double)
- Corded seam
- Taped seam

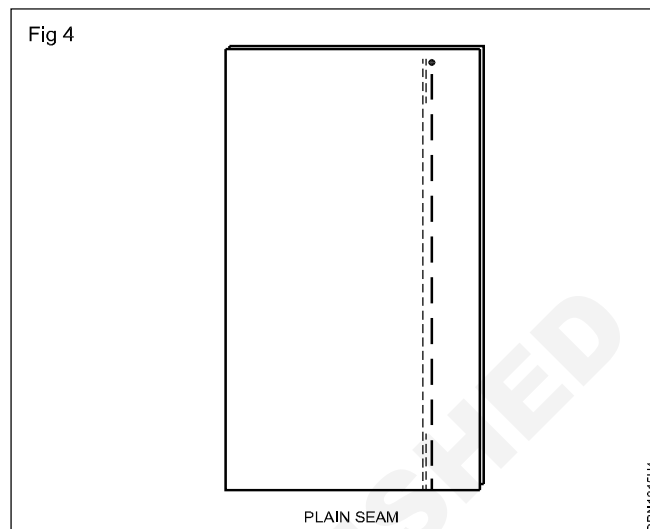
2 **Plain seam:** Take two pieces of fabric (25 x 10 cm each). Mark a line on one of the pieces 1 cm away from the edge lengthwise. Mark from the wrong side. Pin both pieces perpendicular to the seam line in regular intervals keeping the right sides of fabric together. (Fig 2)



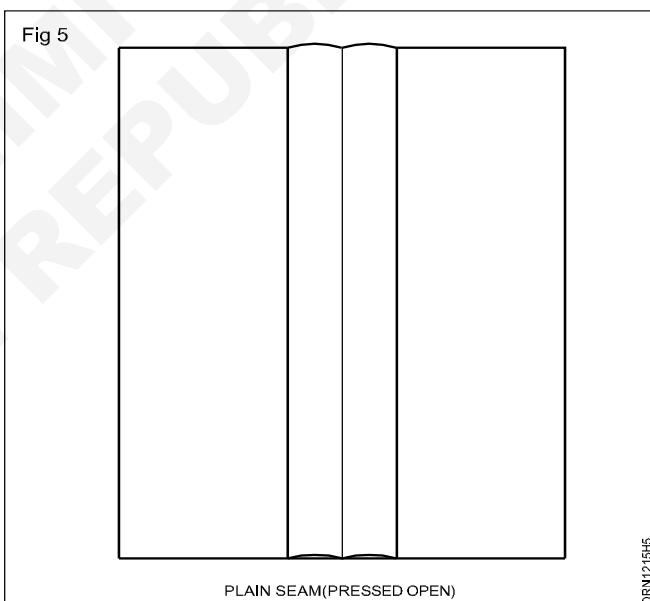
1 Baste on the line by hand and remove the pins. (Fig 3)



2 Position the needle on the seamline (ie. close to basting line) 1cm from the upper edge. Lower pressure foot. Stitch back to the end, then stitch forward on seamline close to but not through the basting line. Here also stitch back 1 cm at the end. Trim and remove basting threads. (Fig 4)



3 Open the two pieces of fabric and press the seam allowances open. (Fig 5)



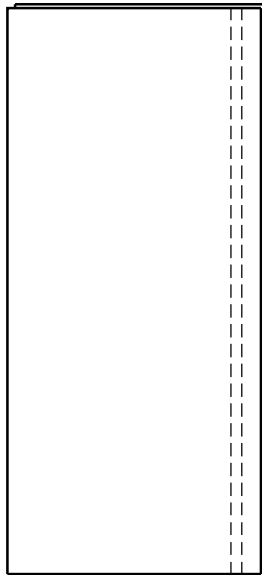
Double stitched seam (used in heavy and stretch fabric for longer life of seam): Take two pieces of fabric. Mark two lines parallel to the raw edge, 0.7 cm and 1 cm away from the raw edge. Stitch a plain seam on each of the marked lines. (Fig 6)

Pinked seam (used to avoid fraying of edges): Form a plain seam at a distance of 1.5 cm from the raw edge.

1 Pink the edges of both seam allowances by using pinking shears. (Fig 7)

For best results, do not fully open the scissors or close all the way to the points. If the fabric is crisp and of light weight, it is possible to trim two edges at once, otherwise do one edge at a time. Pinking will not prevent fraying totally.

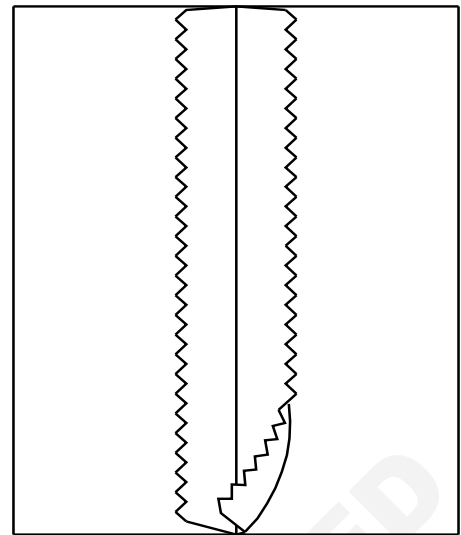
Fig 6



DOUBLE STITCHED SEAM

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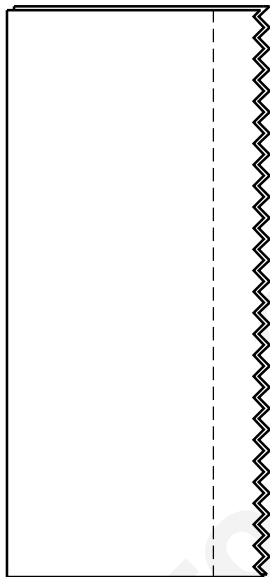
Fig 8



PINKED SEAM (PRESSED OPEN)

DRN1215H8

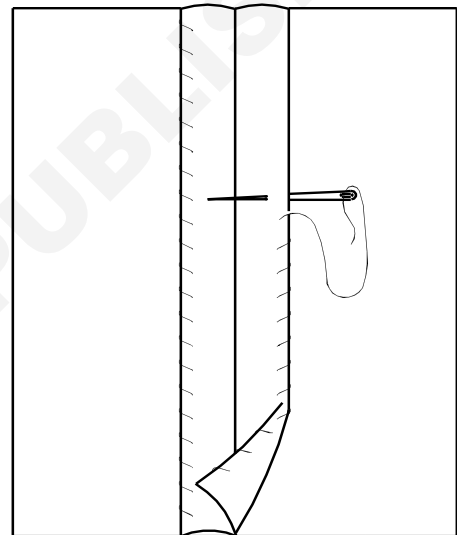
Fig 7



PINKED SEAM

DRN1215H7

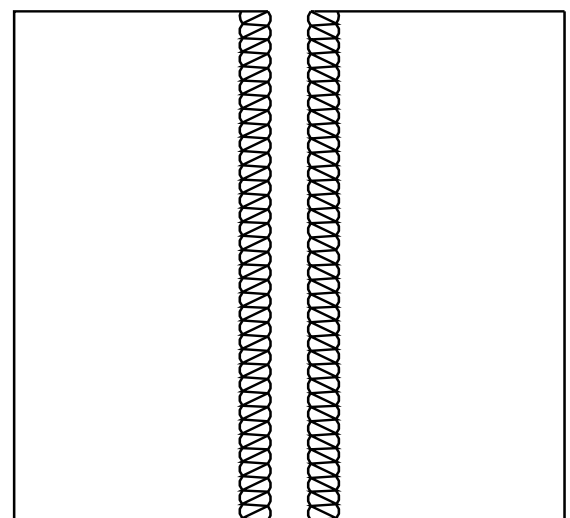
Fig 9



OVERCASTING SEAM

DRN1215H9

Fig 10



OVERLOCK SEAM

DRN1215H4

Then press the seam open. (Fig 8)

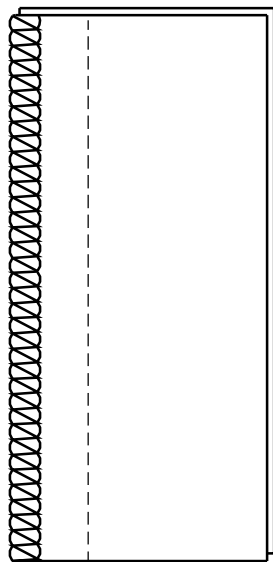
Overcasting seam (used to finish raw edges): Form a plain seam pressed open.

Make diagonal (overcasting) stitches by hand at the edge of each seam allowance approximately 3 mm in depth and spaced 6 mm apart. Do not pull the thread tight. Maintain equal distance in depth and distance. (Fig 9)

Overlock seam (most common seam finish.): Two methods are applicable to perform this kind of seam finish.

- 1 Take two pieces of fabric and stitch the edges with overlock machine separately. (Fig 10)
- 2 Join both pieces right sides together with plain seam. (Fig 11)
- 3 Press open the seam (Fig 12).

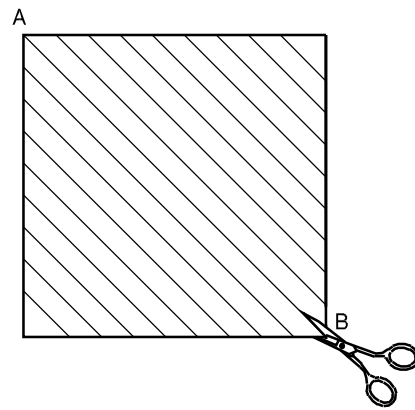
Fig 11



OVERLOCK SEAM

DRN1215HB

Fig 13



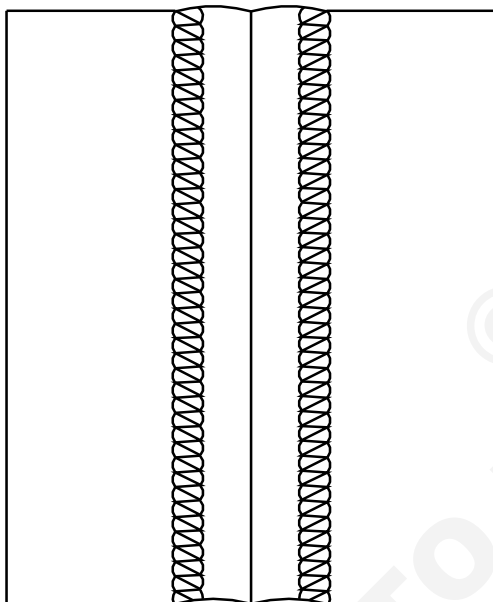
DRN1215HD

Fig 14



DRN1215HE

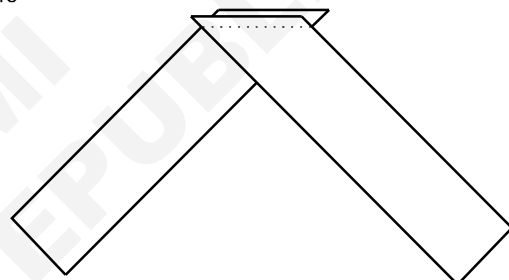
Fig 12



OVERLOCK SEAM

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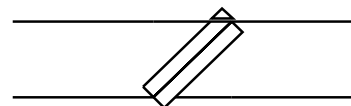
Fig 15



DRN1215HF

- 4 Press open the seam carefully so that bias edges of strips do not stretch, because the bias edges stretch easily and loose shape.
- 5 Cut the extended points to make the bias edge of the strip straight. (Fig 16)

Fig 16



DRN1215HG

- 4 **Or:** Join both pieces with plain seam (1 cm seam allowance). Press open and finish each seam allowance with overlock machine separately.

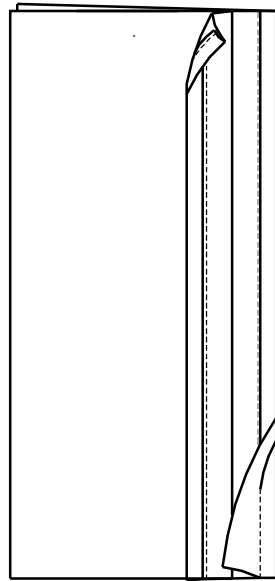
Joining bias strips: Take a square piece of fabric (size 20 x 20 cm) and draw a line diagonally between 2 opposite corners, between A and B.

- 1 Draw parallel lines at a distance of 2.5 cm on both the sides of the diagonal line. Cut on the drawn lines to make bias strips. (Fig 13)
- 2 To join the bias strips place the strips on a flat surface, angles matching. (Fig 14)
- 3 Place one strip on the other with right sides together. Pin them with seamlines matching. Strips should form 'V' shape exactly as shown. Take and stitch together at a distance of 0.5 cm from the edge. (Fig 15)

Hong kong (seam finish for heavy fabrics): Take two pieces of 25 x 10 cm and join them with plain seam pressed open. Give 1.5 cm seam allowance.

- 1 Place one bias strip on the seam allowance, edges congruently together with right sides, and stitch at a distance of 0.5 cm from the raw edge.
- 2 Turn the bias strip over the edge to the under side and turn the other edge of the strip 0.5 cm inside and press it.
- 3 Set this folded edge up to the seam. Tack it. From the right side, stitch in the crevice of the first stitching. Trim the unfinished edge of the bias. (Fig 17)

Fig 17



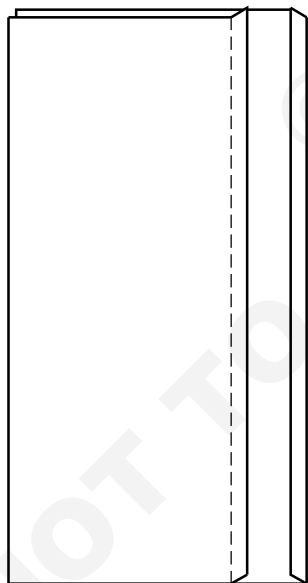
HONG KONG SEAM

DRN1215HH

4 Repeat it on the other side of the seam allowance.

Self bound seam (seam finish in light weight fabrics): Stitch a pressed open seam giving 2 cm seam allowance. Trim one seam allowance to 3 mm. Turn the other seam allowance by 3 mm and press. (Fig 18)

Fig 18



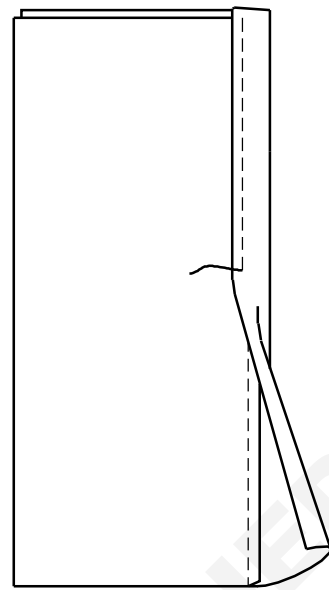
SELF - BOUND SEAM

DRN1215HI

Turn and press again and bring the folded edge to the seam line so that the trimmed edge is now enclosed. Stitch close to the fold as near as possible to the first line of stitching. (Fig 19)

French seam (seam finish for tops and shirts used in loose woven fabrics.): The French seam is stitched twice, first from the right side and then from the wrong side. Take two pieces of fabric and place them with wrong sides together. Stitch at a distance of 3 mm from the edge on the right side. Trim the seam allowance.

Fig 19

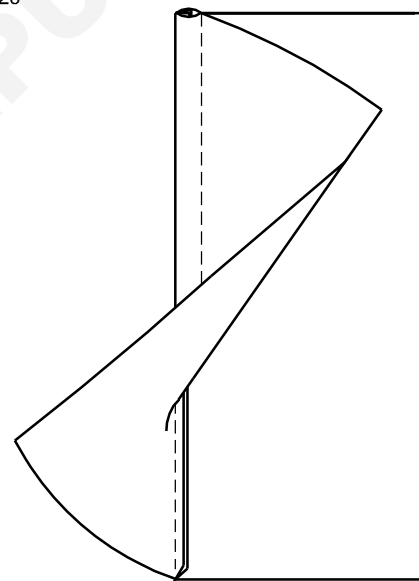


SELF - BOUND SEAM

DRN1215HU

- 1 Press the seam allowances both to one side.
- 2 Fold right sides together, with stitched line exactly on the edge fold, and press again.
- 3 Stitch a seam line 0.6 cm away from the edge. (Fig 20)

Fig 20



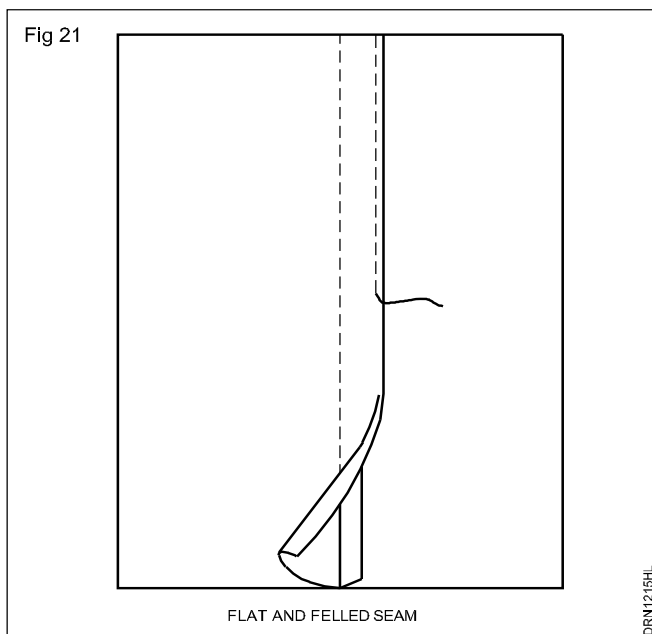
FRENCH SEAM

DRN1215HK

Flat and felled seam(used in side seams of tops, shirts, denims etc. trousers, crotch attachment, trouser inseam and side seam, suitable for heavy cotton fabrics.): The flat felled seam is formed on the right side of the fabric. With wrong sides of the fabric together form a pressed open seam at a distance of 1 cm from the edge.

- 1 Trim one side of the seam allowance leaving 3 mm. Fold edge of other seam allowance by 3 mm to the wrong side. Press, baste and stitch this folded edge to the fabric.

2 Remove the basting and press it. (Fig 21)

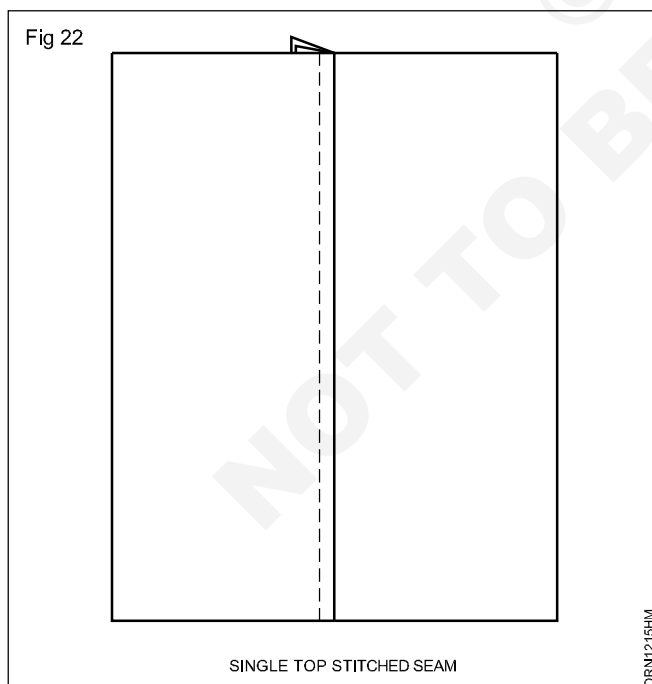


Since the seam is formed on right side of the fabric you must take care to keep the seam width uniform.

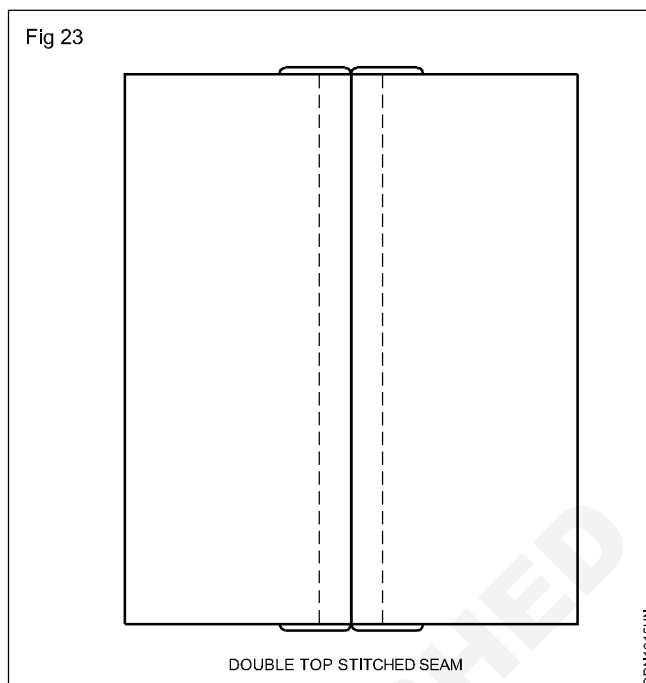
Topstitched seams (for longer lasting seams and decorative purpose)

Single top stitched seam: Press and flat the seam allowance of plain seam to one side and press it.

- 1 Turn the fabric to the right side and stitch seam line at a distance of 2 mm from the previous seam line over the seam allowance side. (Fig 22)

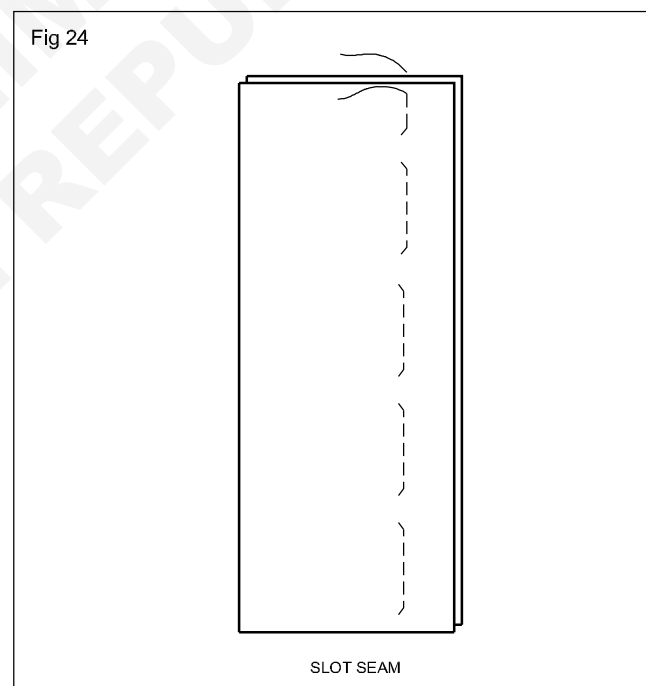


Double top stitched seam: Form a plain seam and press the seam allowance open (to both sides). Turn the fabric to the right side and stitch two seams parallel (each 3 mm away on either side of 1st seam) over the seam allowance. (Fig 23)



Slot seam (decorative purpose): Increase the stitch length of the sewing machine.

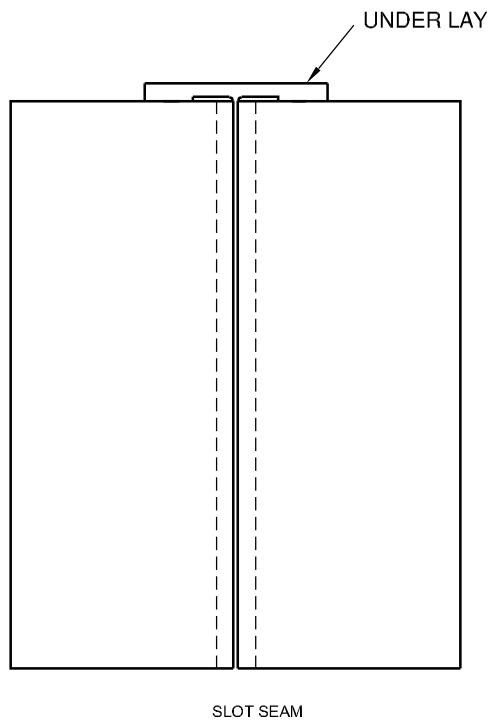
- 1 Baste with machine on the seam line, leaving long threads at the end. Clip bobbin thread at every fifth stitch. (Fig 24)



- 2 Press the seam open. Cut the underlay piece of same or contrasting fabric (of size 25 x 4 cm). Fold the underlay lengthwise and form a crease line. Under the seam line match the crease line of underlay. Place it on the pressed open seam and baste it along the raw edge. Top stitch at a distance of 0.5 cm from the centre on each side. Stitch from the right side of fabric. Pull out the basting threads. Press it. (Fig 25)

Lapped seam (used to reduce bulk of seam allowance, especially on interfacing and interlining): Mark a line 1 cm from each edge of two pieces of fabric.

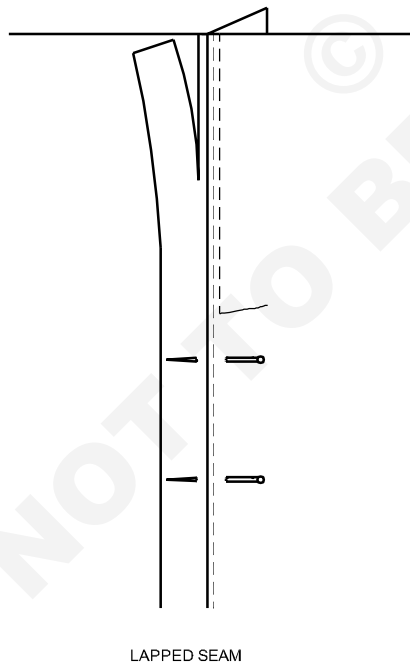
Fig 25



DRN1215HP

- 1 Lap one edge of the sample piece over the other with lines meeting in the centre of overlapping portion and baste it. Place a row of straight stitches on either side of the mark. Trim both seam allowances close to stitching. (Fig 26)

Fig 26

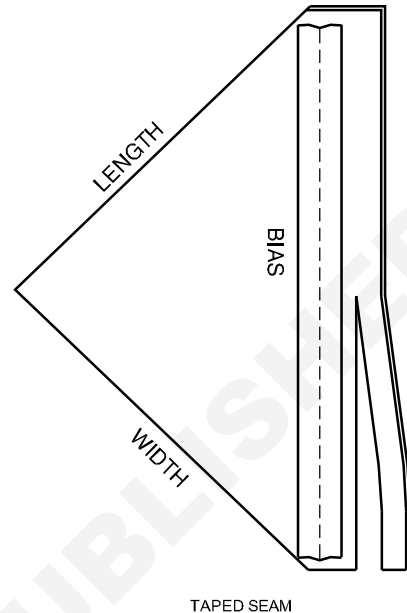


DRN1215HT

Taped seam (specially placed on stretch material and on bias joints to prevent stretching and breaking of seam thread.): Cut a piece of cloth 20 x 20 and cut it diagonally from the centre. Stitch a plain seam 1 cm from the long diagonal cutting lines with right sides of fabric together.

- 1 Take a piece of selvedge or tape in straight grain (30 x 1.5 cm). Fold the tape on its center.
- 2 Place the fold of tape exactly on the previous seam line, then stitch a straight seam on the line.
- 3 Cut the excess length of the tape and trim seam allowance. (Fig 27)

Fig 27

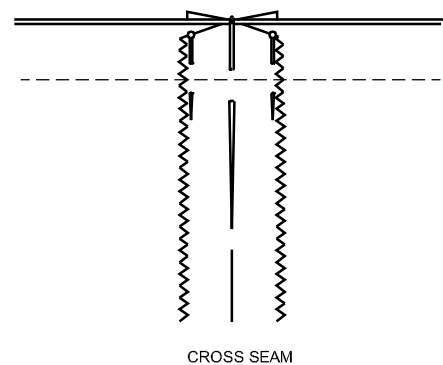


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Cross seam (used to join 2 seamed parts crosswise for example for crotch attachment): Take four pieces and join two at a time with plain seam.

- 1 Cover one piece with the other with right sides together, seam lines aligned.
- 2 Pin through both seam lines with a fine needle. Then pin through both seam allowances on each side of the matched seam lines.
- 3 Stitch a straight seam line in right angle to the first seam lines.
- 4 When the seam is stitched, trim all the corners of the seam allowances diagonally to reduce bulk. (Fig 28)

Fig 28



DRN1215HV

Make samples of darts & pleat

Objectives: At the end of this exercise you shall be able to

- construct a plain dart
- create a contour dart and French dart.

Requirements

Tools / Equipments

- Iron box - 1 No.
- Hand needle - 1 No.
- Scissors - 1 No.
- Dress maker's pin - 1 No.
- Scale - 1 No.
- Lock stitch sewing machine - 1 No.

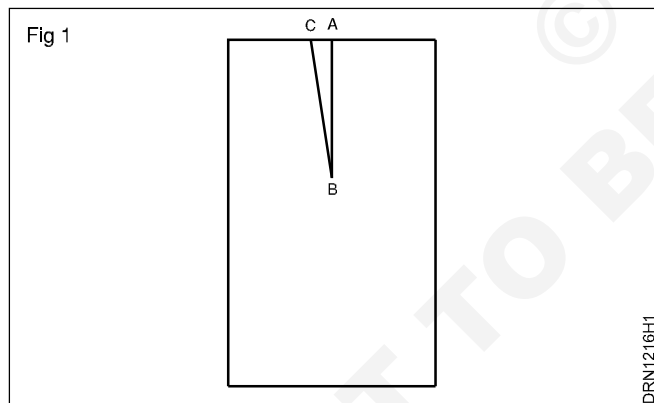
Materials

- Long cloth - 0.15 x 0.75 m
- Sewing thread - 1 No.
- Poplin - 0.60 x 0.90 m
- Poplin (contrasting colour) - 0.20 x 0.20 m
- Sewing thread - 1 No.
- Damp cloth - 1 No.

PROCEDURE

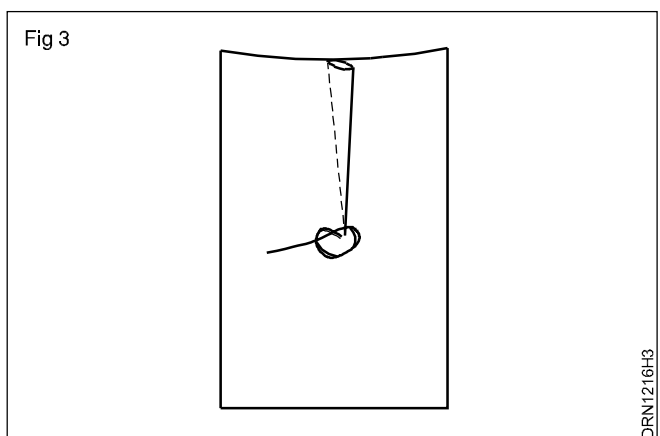
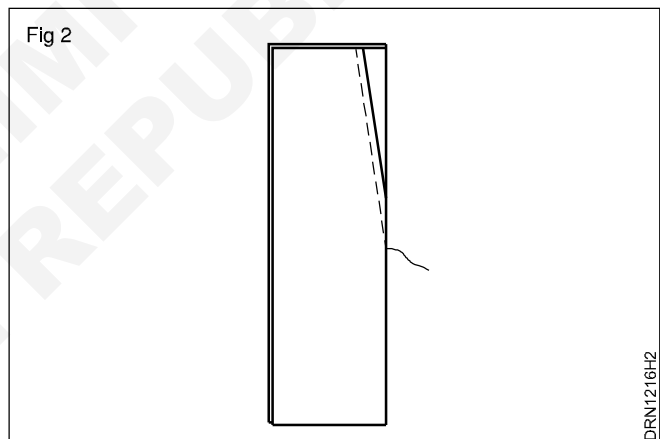
TASK 1: Construct a plain dart (half dart)

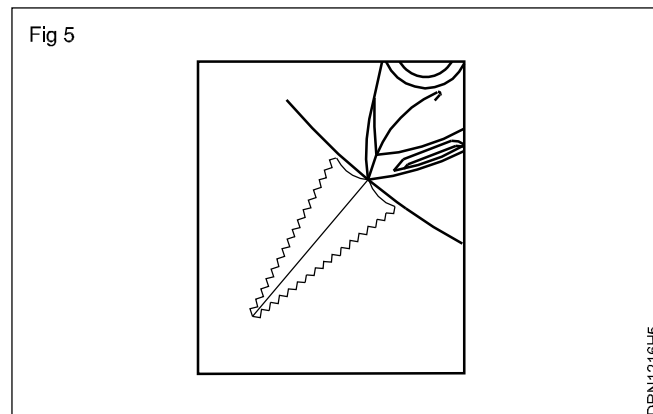
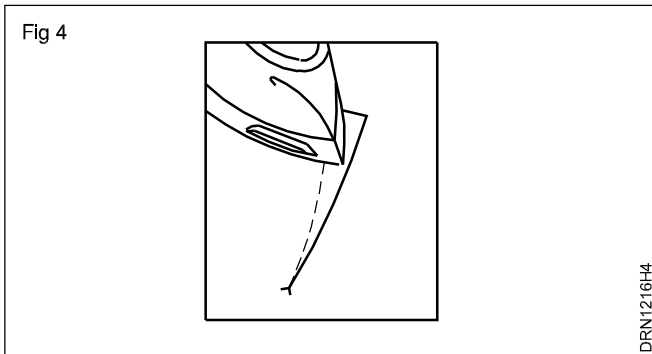
- 1 Take a piece of fabric (25 x 15 cm) for the construction of a plain dart.
- 2 On the wrong side of the fabric mark a line A-B according to the dart length required (10 cm) and mark point C according to half of the dart width (1.5 cm). Join B and C. For marking, use tailor's chalk. (Fig 1)



- 3 Fold the fabric on the line A-B with right sides together and baste just beside the line BC. (Fig 2)
- 4 Stitch on the mark with machine. Lock stitch in the beginning. Tie the knot, leaving thread at the end. (Fig 3)
- 5 Trim the thread and press dart. (Fig 4)

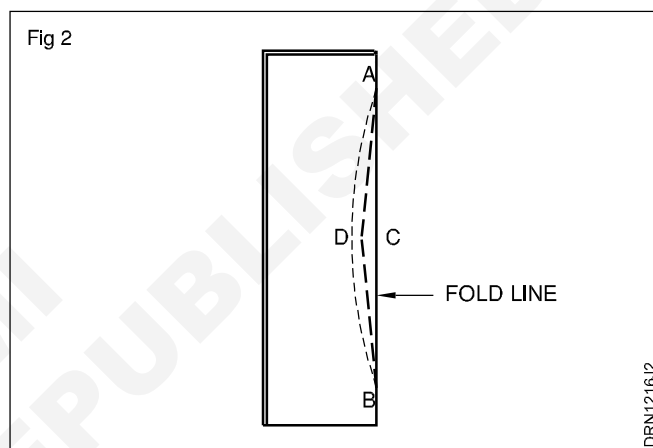
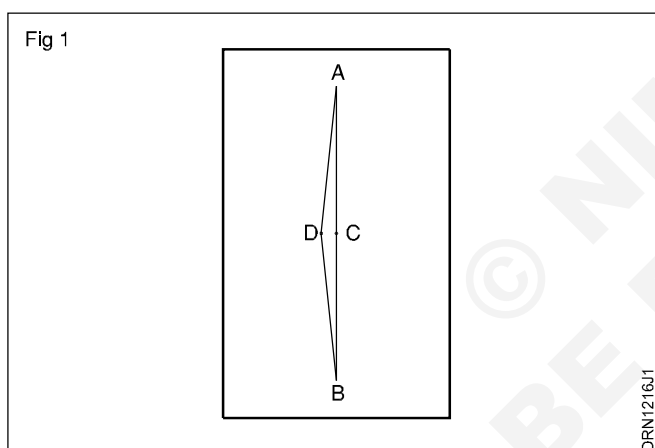
If you use thick fabric for the dart, slash the folded portion of the dart leaving 1 cm at the end of the dart and press open. This is called slashed dart. Use pinking shears, if fabric is fraying easily. (Fig 5)



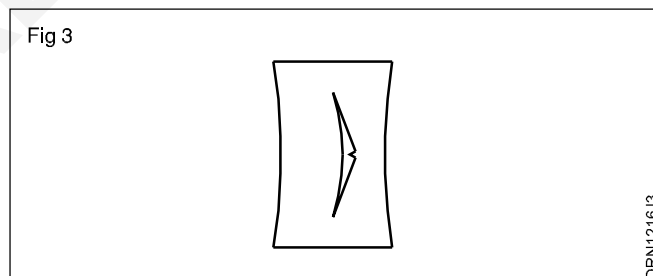


TASK 2: Construct a contour dart (double pointed dart)

- 1 Take a piece of fabric (25 x 15 cm). On the wrong side of the fabric mark a vertical line A-B (keep same distance from upper and lower edge). Mark according to the dart length required (15 cm) and mark point C at the centre of the line A-B. Take 1.5 cm, i.e. half of the dart width from C and mark point D. Join line A-D and B-D. (Fig 1)

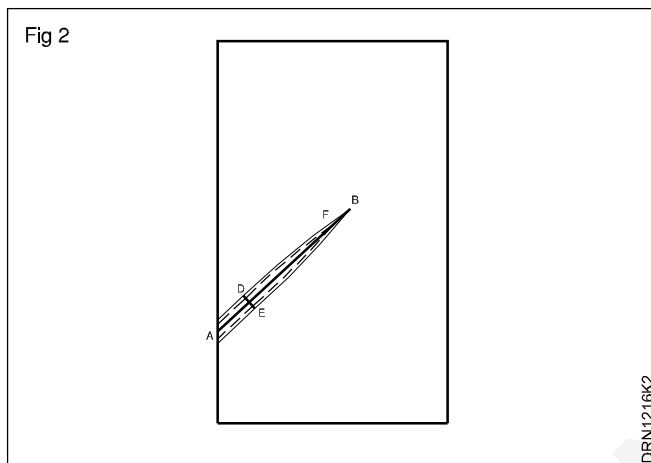
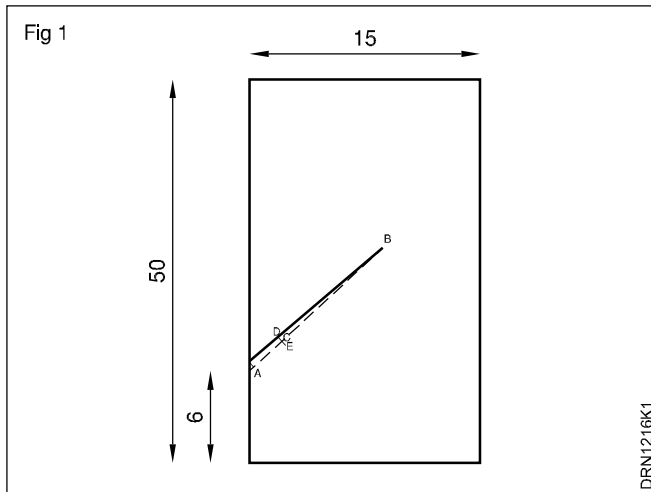


- 2 Fold the fabric on line AB (with right sides together) and pin the dart on the line A-D-B. Baste just inside the line A-D-B and remove the pins. Stitch with machine on the mark, maintaining curved shape at point D. (Fig 2)
- 3 Tie and trim the threads at both ends of the dart.
- 4 Remove basting. Clip the dart within 3 mm from C towards D. (Fig 3)



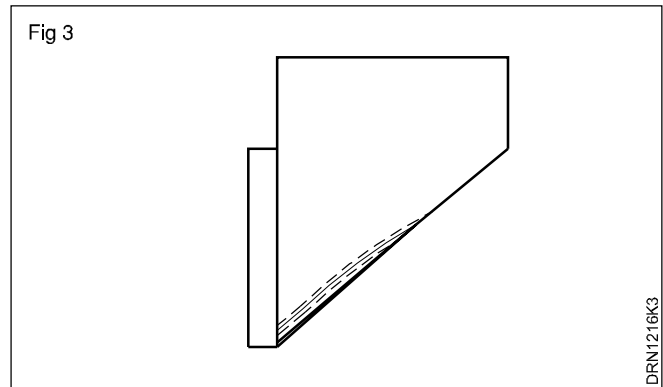
TASK 3: Construct a French dart (curved dart)

- 1 Take a piece of cloth (25 cm x 15 cm). Mark point A at a distance of 6 cm from the lower corner on 25 cm long side. Draw a diagonal line of 12 cm dart length in the direction of opposite corner. Mark B at the end of the line.
- 2 At a distance of 4 cm from A mark C. Square up on either side on point C and mark D and E at a distance of 2 cm, i.e. half of the dart width. (Fig 1)
- 3 Draw the 2 dart lines beside the centre line: take a distance of 2 cm and draw from edge of cloth to D and E. Then taper the line up to point B where the lines meet.
- 4 Between dart line and centre line make stay stitches by small running stitches 1 cm away from the dart line. Finish it in point F, i.e. 1.5 cm away from point B. (Fig 2)
- 5 Slash the centre line of dart from A to F.

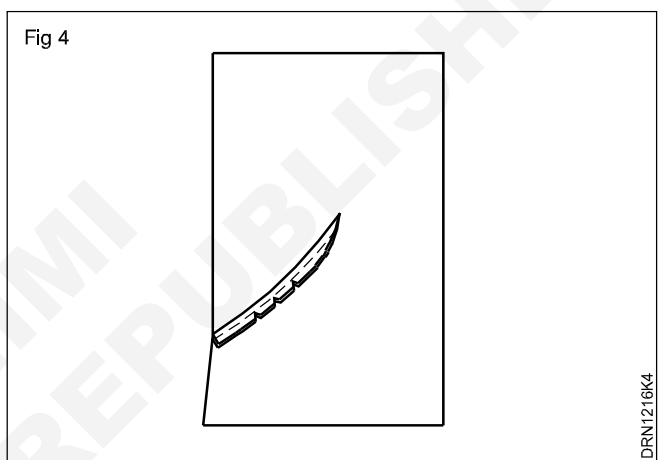


- 6 Fold the fabric with right sides together, matching the raw edges neatly. Pin and baste slightly away from the stitching line.

- 7 Stitch with machine on the shaped dart line. Knot the thread on tapered end and trim off the threads. (Fig 3)



- 8 Clip the seam allowance close to stay stitch, unfold the cloth and stretch out the raw edges. Press the dart flat, keeping the raw edges of the seam allowance downwards. (Fig 4)



Make samples of pleats

Objectives: At the end of this exercise you shall be able to

- construct and stitch side pleats
- construct and stitch inverted pleats
- construct and stitch box pleats
- construct and stitch pleats with separate underlay.

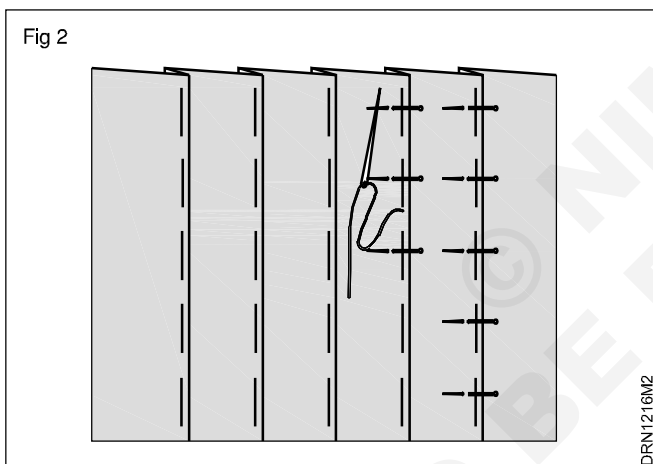
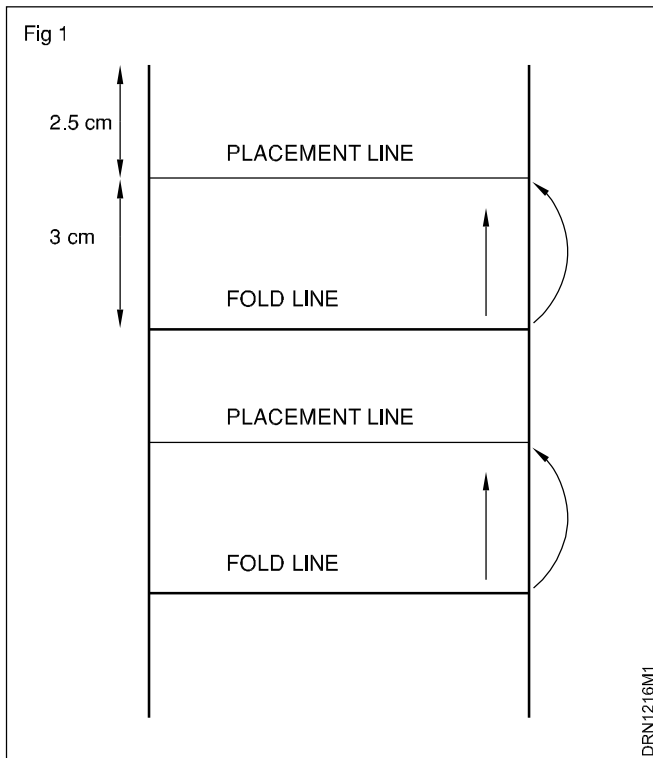
TASK 1: To construct and stitch side pleats (knife pleats)

- 1 Mark and cut the given material in 2 pieces of 0.20 x 0.45 m, 2 pieces of 0.20 x 0.90 m.
- 2 Take a piece of cloth size 0.20 x 0.45 m.
- 3 Marking will be done on wrong side with tailor's chalk.
- 4 Mark fold lines and placement lines as per figure 1 on full width of sample. Width of the pleat is 1.5 cm and distance between two pleats is 2.5 cm. (Fig 1)
- 5 Transfer all markings to the right side using tracing wheel.

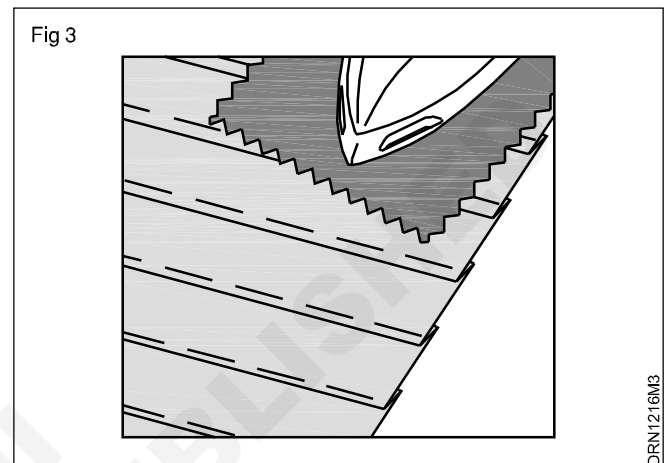
Transferring of marks can also be done by cutting notches. Place them at the edge of fabric, so that they will be invisible in the pleats.

- 6 Work on right side now. Fold the fabric along the foldline and bring it to its placement line. Pin pleats through all layers. Baste pleats close to the fold line through all thickness and remove the pins. (Fig 2)

If the pleats are very long, basting is done 5-8 cm on top and a horizontal baste line is given on the bottom.



- 7 Make a row of machine stitches at 1 cm distance from the edge, right angled to the pleats. Lock the stitches at the starting and at the end.
- 8 Place the cloth right side up on the iron board and press the pleats.
- 9 Use a damp muslin cloth and place it upon the pleats before you press. Press the iron only, don't move it forth and back, since this will damage the folds. Press again without cloth and do not move the fabric until it is quite dry. Repeat the process on the wrong side. (Fig 3)

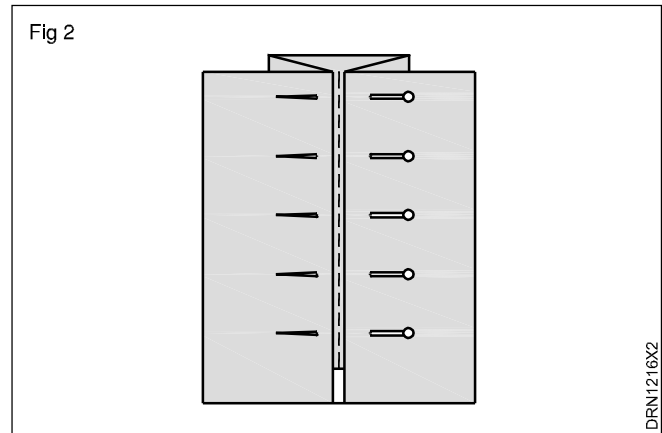
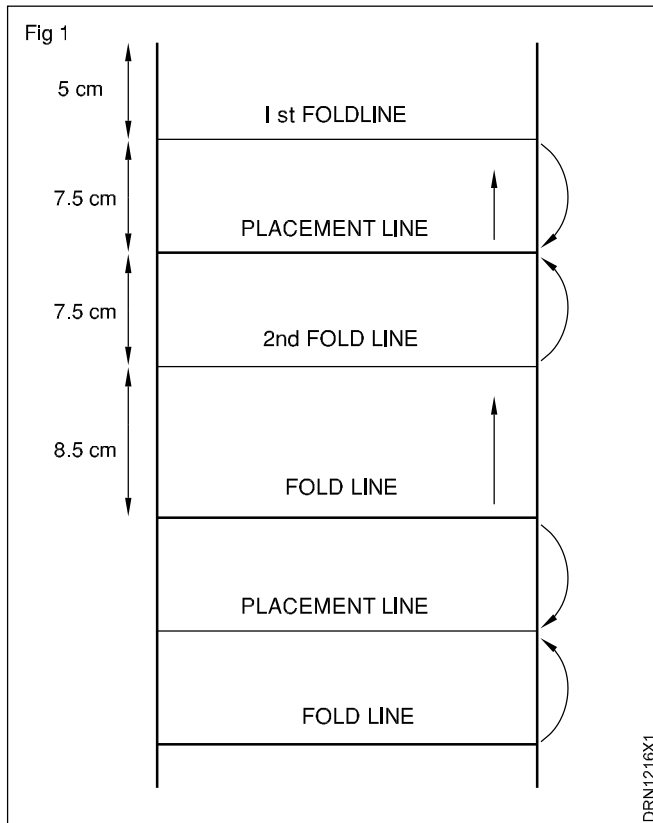


TASK 2: Construct and stitch inverted pleats

- 1 Take a piece of cloth size 0.20 x 0.90 m. Mark on wrong side. Mark fold lines and placement lines as per figure 1. Width of the pleat will be 7.5 cm, distance between two pleats is 1 cm. from wrong side. (Fig 1)
- 2 Transfer all marks to right side using tracing wheel or notches.
- 3 Work on right side now. Fold and bring 1st and 2nd fold lines from right and left to placement line. Pin pleats (each pin fixes both fold lines) through all thickness. (Fig 2)

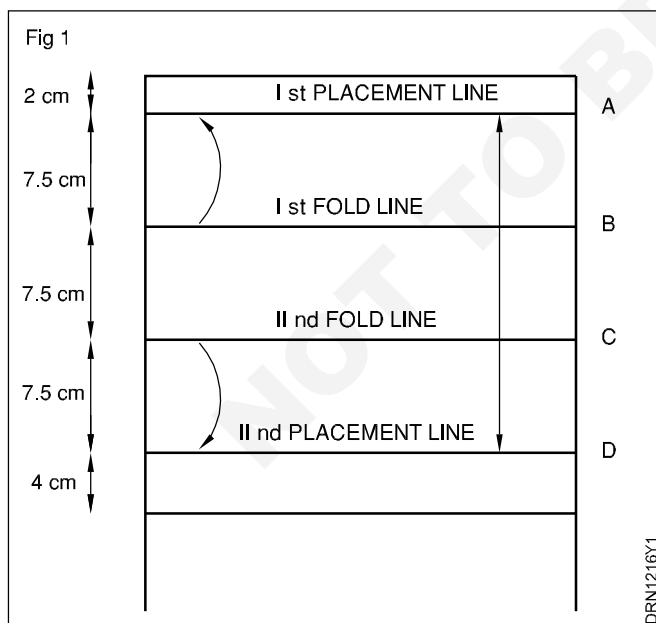
Take care that both fold lines meet on placement line.

- 4 Repeat the process for all pleats.
- 5 Pin and baste pleats close to fold lines through all layers. Make a row of machine stitches at 1 cm distance from edge right angled to the pleats. Remove pins.
- 6 Press the pleats with a damp cloth.



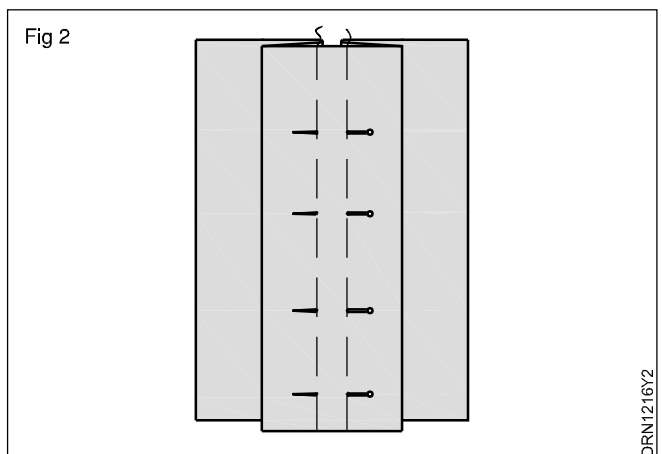
TASK 3: Construct and stitch box pleats

- 1 Take a piece of cloth size 0.20 x 0.90 m.
- 2 Mark fold lines and placement lines from wrong side as per figure 1. Width of pleat is 7.5 cm, distance between two pleats is 4 cm. (Fig 1)



- 3 Transfer all marks to right side using tracing wheel.

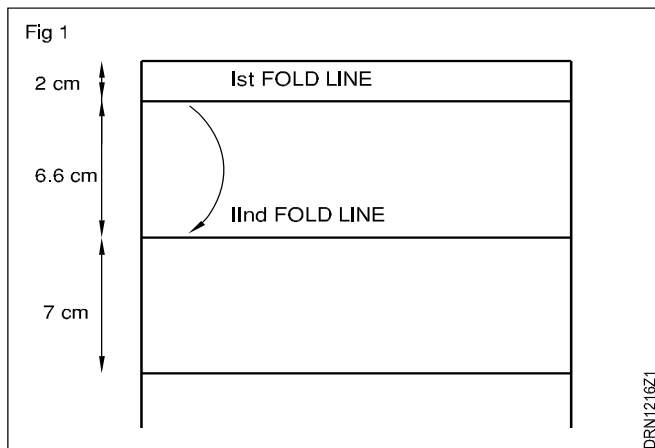
- 4 Work on right side now. Fold 1st fold line 'B' and bring it to the 1st placement line 'A' and fold 2nd fold line 'C' and bring it to the 2nd placement line 'D'. Continue for the pleats.
- 5 Pin the pleats through all layers. Fix the pleats with two rows of basting 2-3 mm away from centre line. (Fig 2)



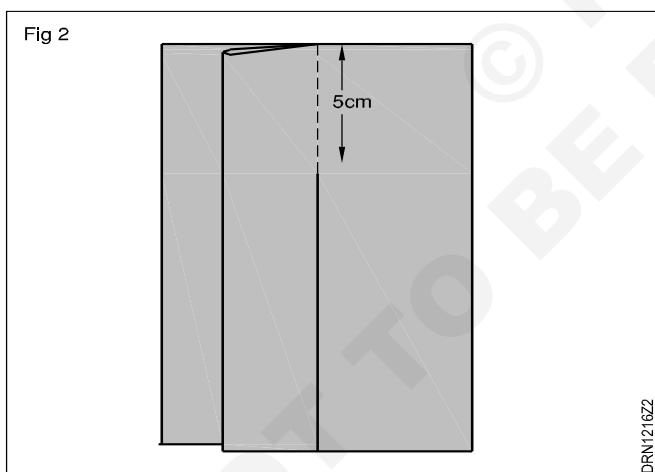
- 6 Remove pins and press the pleats.
- 7 Make a seam 1 cm from the raw edge to hold the pleats. Remove basting.

TASK 4: Construct and stitch pleats with separate underlay

- 1 Take a piece of cloth size 0.20 x 0.45 m and another piece of poplin 0.20 x 0.20 m of contrasting colour.
- 2 Mark on wrong side of the bigger piece.
- 3 Mark fold lines and placement lines as per figure 1. Width of the pleat is 5 cm, seam allowance for pleat extension is 0.8 cm, distance between two pleats is 2 cm. (Fig 1)



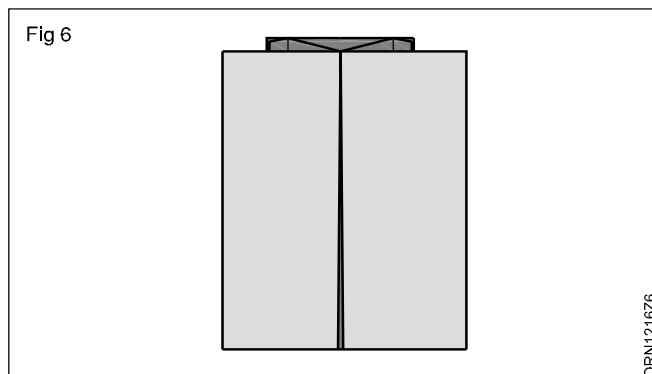
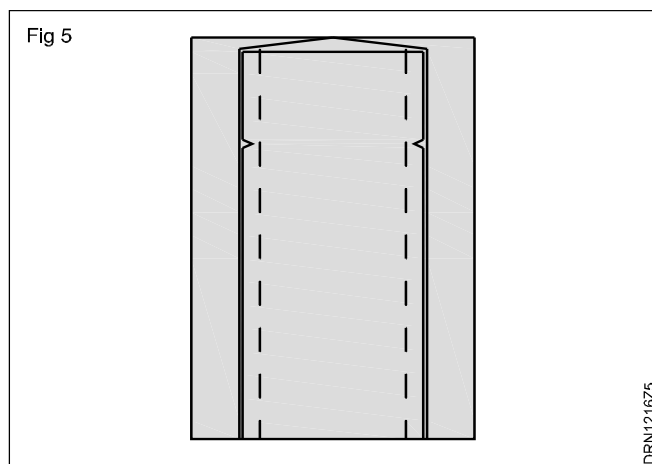
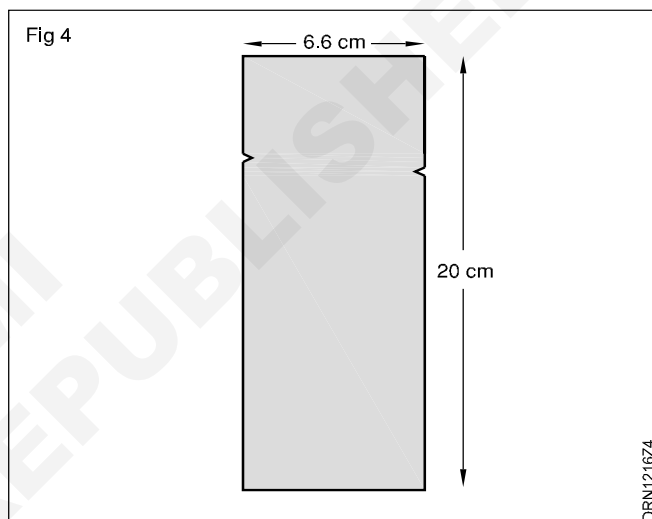
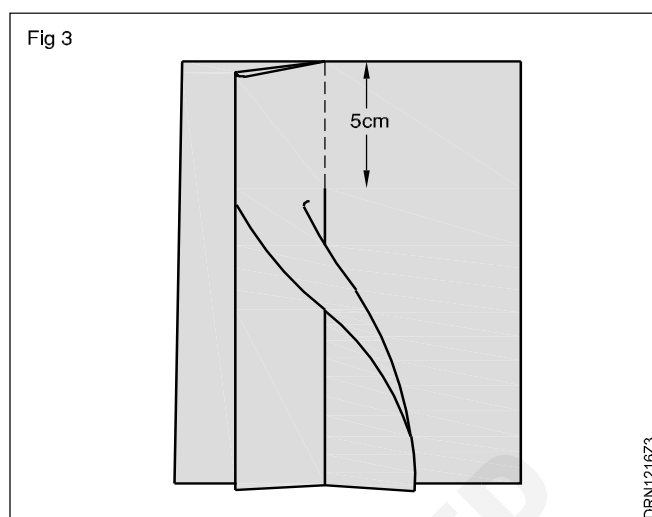
- 4 Transfer the marks on right side using tracing wheel. Place one fold line over the other from right side and baste along fold lines from the wrong side.
- 5 Stitch 5 cm long stitch line from upper edge. (Fig 2)
- 6 Mark on fold 3 cm from upper edge. Then cut along the fold. Press open both parts of pleat (pleat extension). (Fig 3)



- 7 Cut a strip as pleat underlay of 20 cm (pleat length) x 6.6 cm (pleat width + 2 seam allowances). Use fabric of contrasting colour. Cut notches on edge 3 cm below upper edge. (Fig 4)
- 8 With right sides together, place pleat underlay over the pleat extension, match markings, baste along each side. (Fig 5)
- 9 Stitch each side of the pleat underlay to pleat extension leaving 0.75 cm from the raw edge. (Fig 6)

Take care that the main material will not be stitched.

Remove basting and stitch with machine 1 cm from upper edge. Press.



Make samples of tucks, gather and shirrs, frills

Objective: At the end of this exercise you shall be able to

- make samples of tucks.

Requirements

Tools/Instruments

- Zipper foot - 1 No.
- Iron box - 1 No.
- Hand needle - 1 No.
- Scissor - 8" - 1 No.
- Scale - 12" - 1 No.
- Measuring Tape - 1 No.
- Machine Needle - 14No - 1 No.
- Bobbin and case - 1 No.

Equipment/Machines

- Single needle lock stitch machine - 1 No.

- Ordinary sewing machine - 1 No.
- Zigzag machine - 1 No.

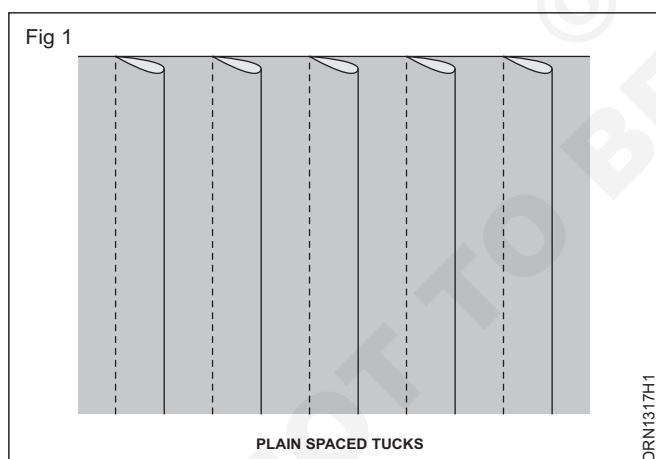
Materials

- Long cloth/ Poplin - 1.20 x 0.90 m
- Cord - 0.75 cm
- Sewing thread - 1 No.
- Cotton fabric - 1 mts.
- Thread - 1 No.
- Pencil (HB) - 1 No.
- Measuring tape - 1 Set.

PROCEDURE

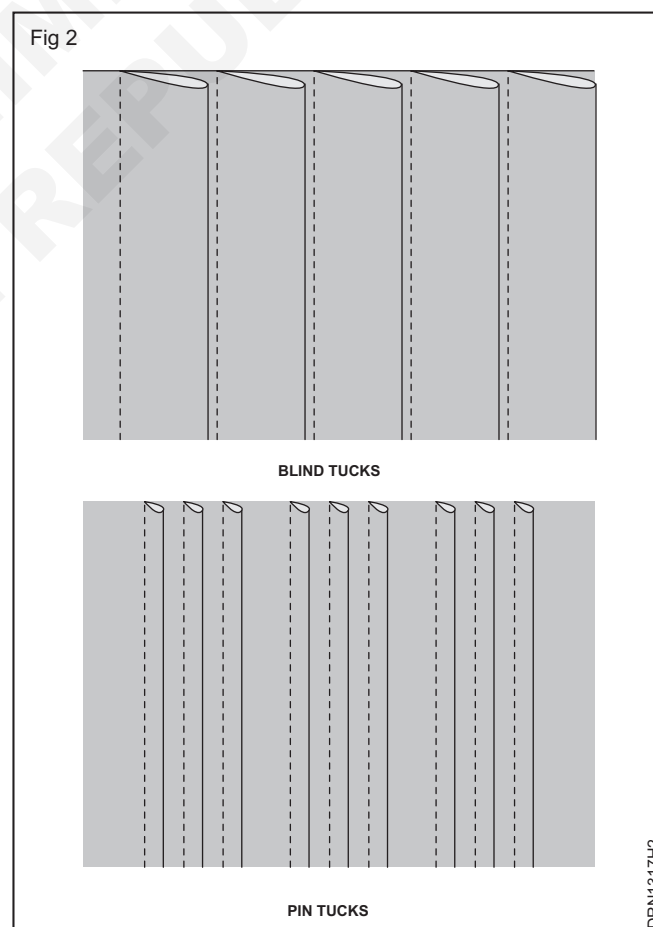
TASK 1: Make samples of tucks

- 1 **Plain spaced tucks:** A tuck is a stitched fold of fabric on right side used mostly for decorative purpose. Take a piece of cloth (15 x 20 cm) and mark fold lines for spaced tucks at a distance of 4 cm from edge. Fold 1st tuck on fold line exactly on the grain and stitch at a distance of 0 - 1 cm. (Fig 1)

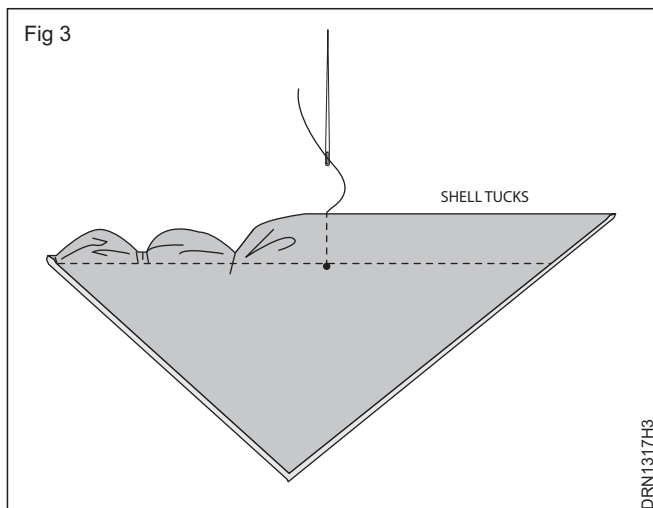


- 2 Stitch and press the tucks all in one direction. Repeat for other types of tucks. Tucks that meet are called blind tucks. A very narrow tuck is a pin tuck. (Fig 2)
- 3 **Shell tucks:** Take a sample piece of 15 x 15 cm. Mark a diagonal line on center. Then set a parallel line on each side at a distance of 5 cm. Fold on the marks to prepare three plain tucks of 1.5 cm.

Set marks on the seam lines of tucks at a distance of 2.5 cm. Insert needle with double thread on first mark and set running stitches through both layers up to the fold line. Pull (draw) the thread to gather the fabric on the mark, then tack it in place, i.e. on seamline.

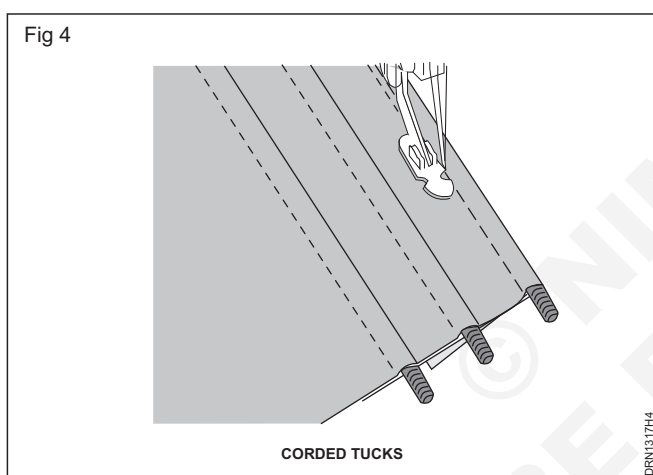


Guide needle inside the layers and bring it out on next mark. Lock the thread with a back stitch on mark. Repeat process as described. (Fig 3)



- 4 Corded tucks:** Take a piece of cloth (15 x 20 cm). Mark fold lines lengthwise at a distance of 4 cm, starting from left edge. Fold the fabric on first line and place cord in between the fold.

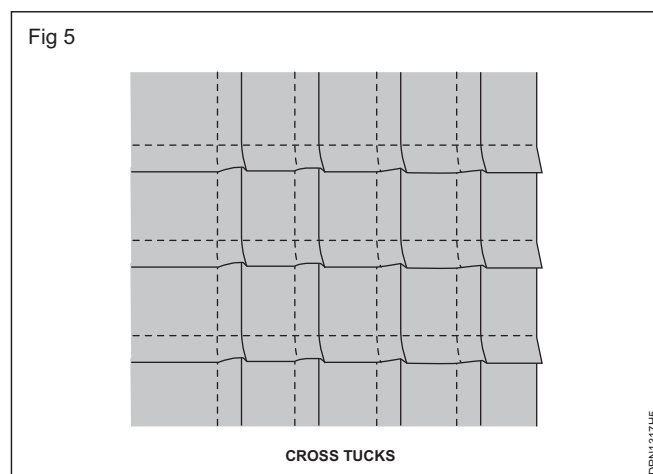
Stitch close to cord using zipper cord foot. (Fig 4)



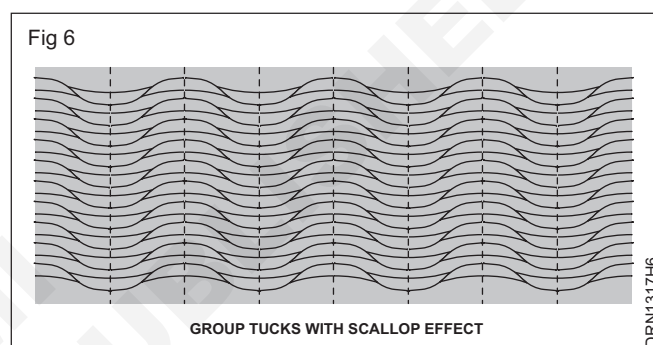
- 5 Cross tucks:** Take a piece of cloth (15 x 15 cm). To prepare cross tucks stitch pin tucks or spaced tucks lengthwise and press them in one direction. Then set and stitch tucks in widthwise direction (right angled to the first ones). (Fig 5)

Group tucking with scallop effect: Take piece of cloth (15 x 30). Stitch blind tucks along widthwise grain and press in one direction.

- 1 Draw lines with pencil along lengthwise grain at a distance of 2.5 cm from each other.
- 2 Stitch along 1st marked line (across the tuck) in the direction tucks were pressed.
- 3 Start from opposite side and stitch along 2nd marking reversing the direction of tucks.

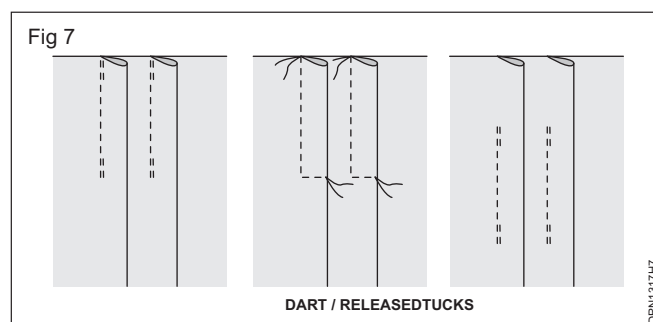


- 4 Stitch along remaining marked lines, reversing the direction of tucks with each stitch line. (Fig 6)



- 6 Dart/released tucks:** Take a piece of cloth (15 x 20 cm).
- 1 Mark lines for spaced tucks.
 - 2 Stitch spaced tucks only upto 4 cm or desired length and secure the thread ends by back stitch or by tying the threads at the edge of tuck.

Sometimes stitching is done in the center of piece only to release fullness from both the ends. (Fig 7)



Make samples of gathers

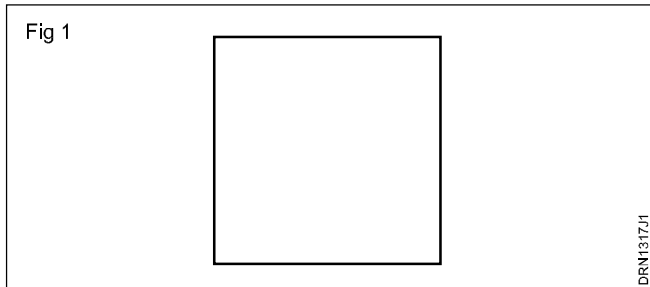
Objective: At the end of this exercise you shall be able to

- make samples of different types of gathers.

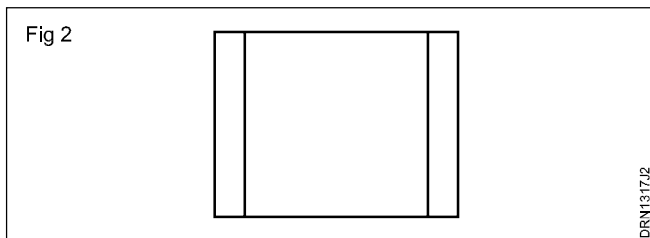
PROCEDURE

TASK 1 : Prepare gathers by hand

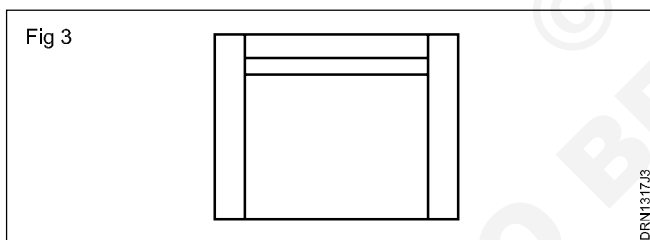
- 1 Cut one cotton fabric piece of size 10cm × 20cm (Fig 1)



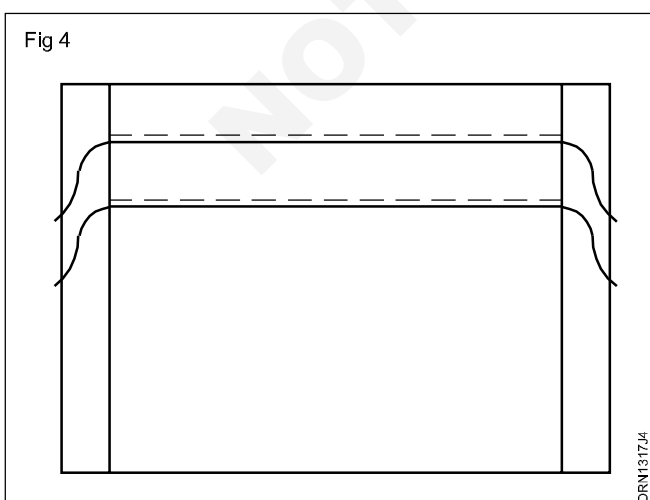
- 2 Mark a line with distance of 1cm on both the edges of the fabric vertically. (Fig 2)



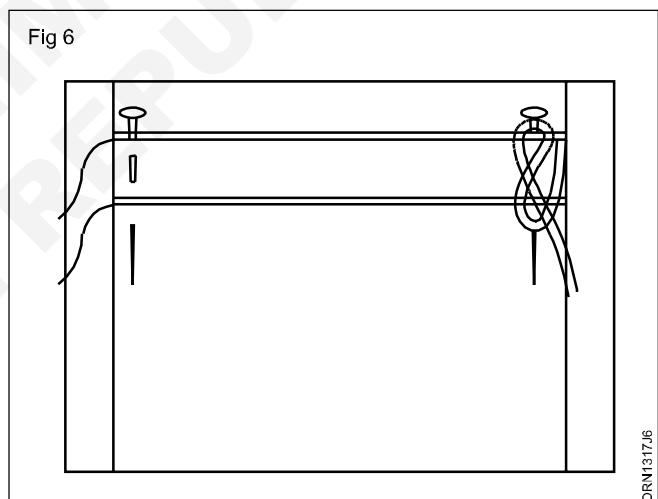
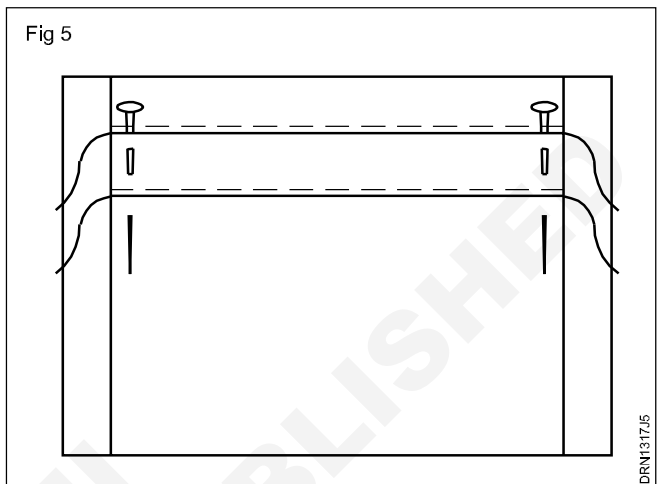
- 3 Mark two horizontal lines with a distance of 1cm from one marked line to the other marked line. (Fig 3)



- 4 Take hand needle and thread don't knot the thread make running stitches. On the lines marked using the threads loose on both the sides. (Fig 4)

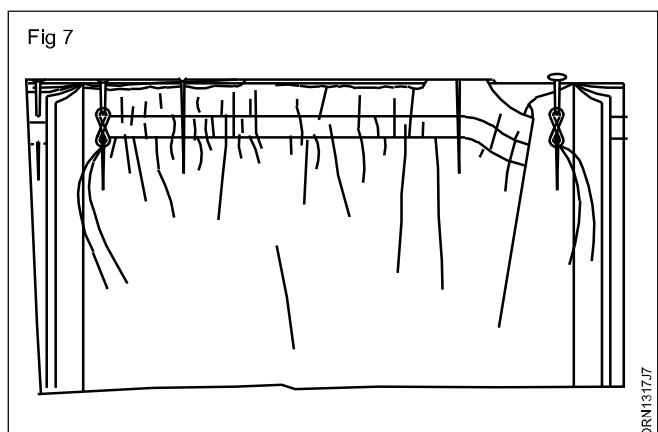


- 5 Pin the stitched edge with the help of pins and twist the end of the loose thread around the pins. (Fig 5 & Fig 6)



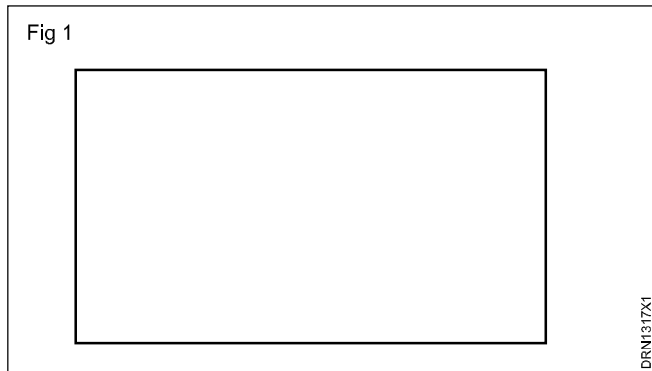
- 6 Fabric is now ready to make the gathers.

- 7 Gently pull on the threads with the hand. So that fabric along the thread creates uniform gathers. (Fig 7)

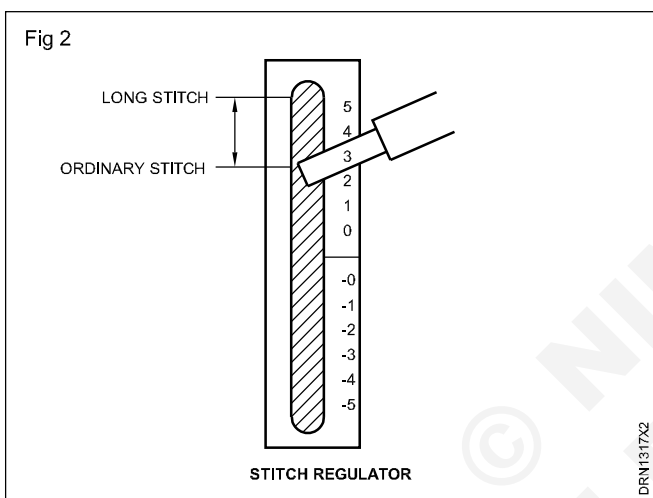


TASK 2 : Prepare gathers by machine

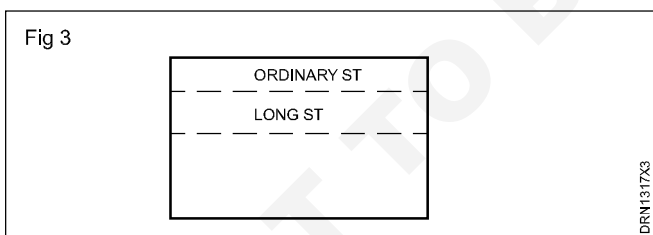
- 1 Cut one cotton fabric piece of size 10cm × 20cm.
- 2 Follow the steps of 2 & 3 of (Task 1). (Fig 1)



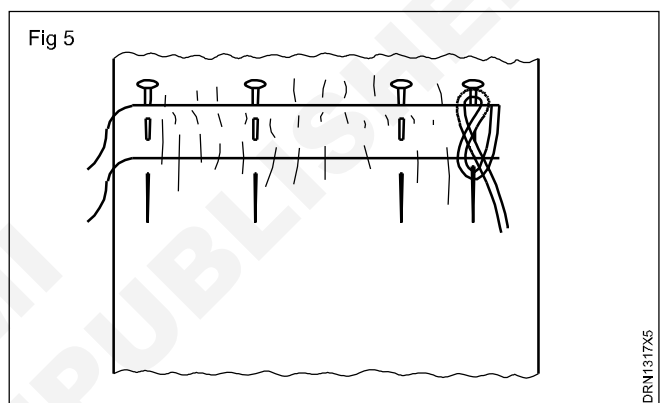
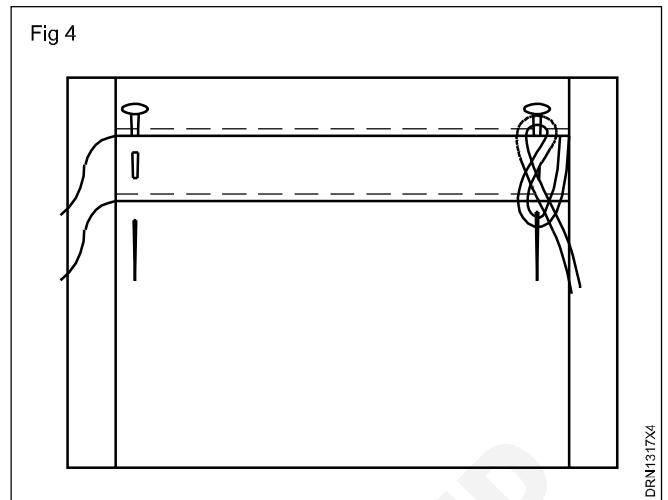
- 3 Adjust the stitches regulator to along stitch from a lower number to a higher number. (Fig 2)



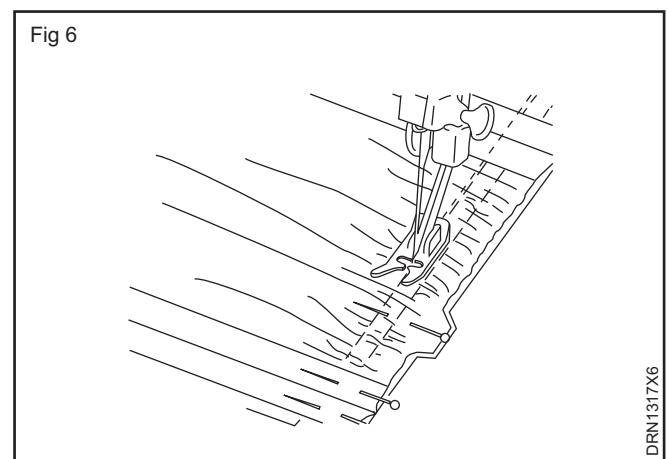
- 4 Now work two parallel rows of long stitches on the fabric leaving long threads at both the ends. (Fig 3)



- 5 Pin & twist the bobbin thread around the pins at an edge and pin the stitches at another edge. (Fig 4)
- 6 Fabric is now ready to gather.
- 7 Gently pull on the bobbin threads from the other end & the gather are created on the fabric. (Fig 5)

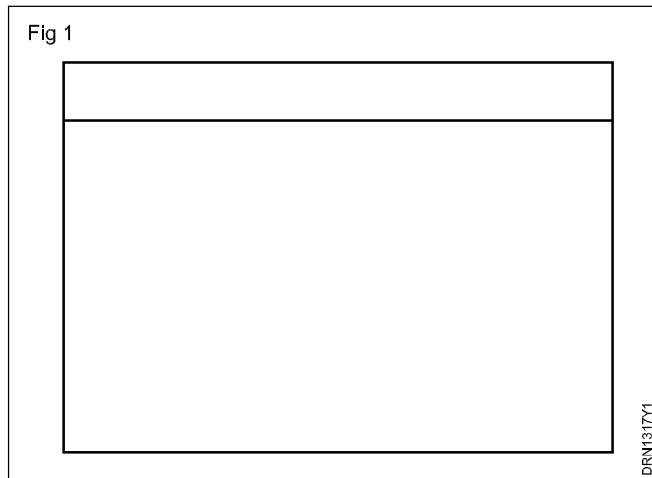


- 8 Adjust the stitch regulator to the normal stitch length.
- 9 Adjust gathers uniformly and pin at frequent intervals to hold folds in place and give a fern machine stitch to hold the gather permanently. (Fig 6)
- 10 Gather are ready.

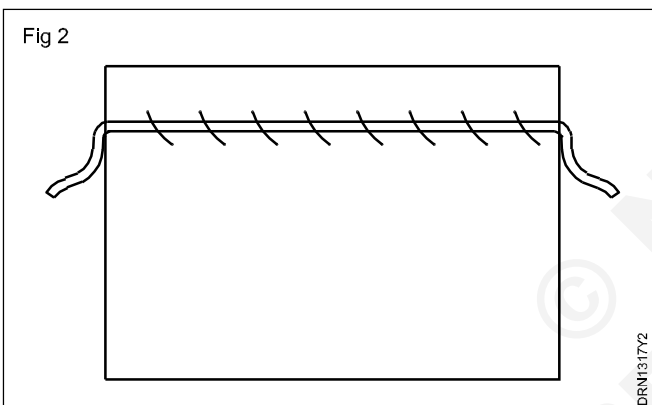


TASK 3 : Prepare corded gathers

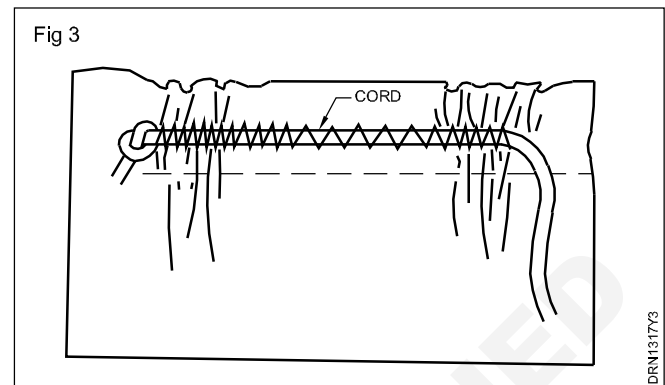
- 1 Cut one cotton fabric piece of size 10cm x 20cm.
- 2 Mark a line with distance of 2cm from the upper edge horizontally (Fig 1).



- 3 Takes strong cord thread and place it on the line drawn using the diagonal bound stitch for the code (Fig 2)

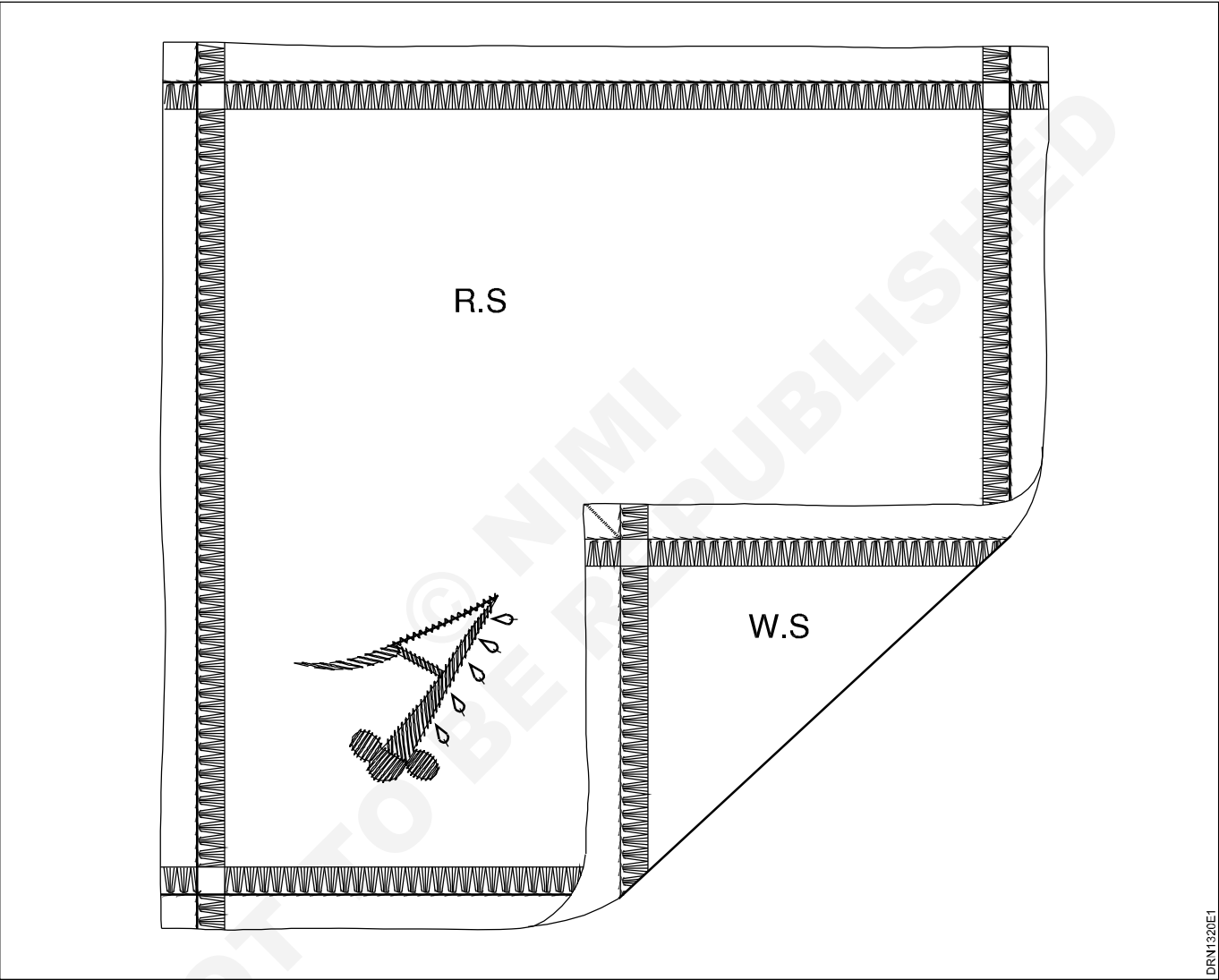


- 4 Make widest zigzag stitch using a zigzag machine over the cord.
- 5 Knot the thread at one end of the stitch gently pull the core from the other end with intervals and form tether (Fig 3).



Practice of the corner making self turned

- Objectives:** At the end of this exercise you shall be able to
- stitch a handkerchief by hand
 - design decorative lettering (monogram)
 - finish different types of corners.



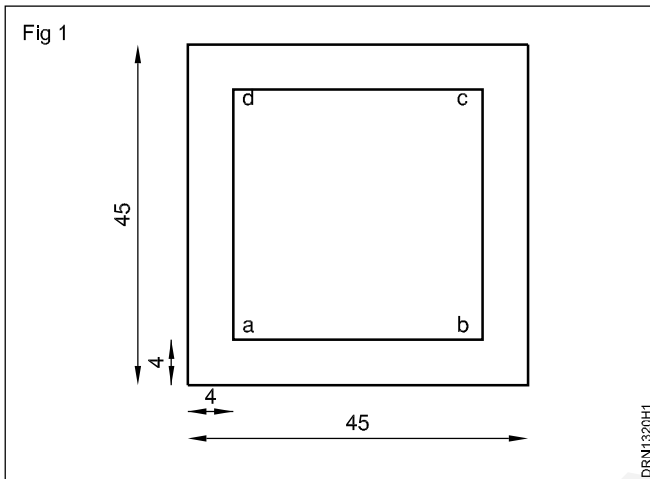
Measurement	Material
0.40 x 0.40 m	0.45 x 0.90 m Cambric

Job sequence

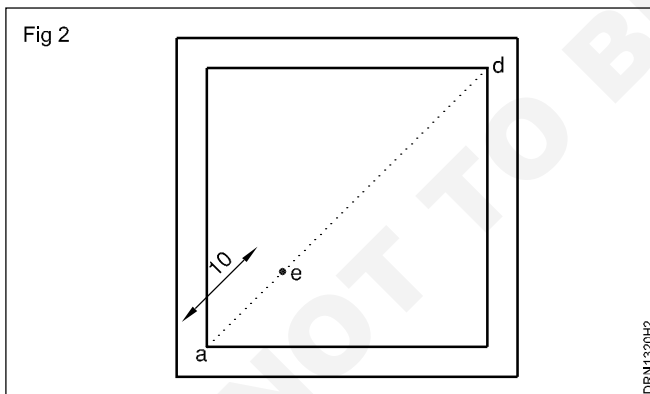
- Cut the material into 2 pieces of 45 x 45 cm. Use one for the handkerchief.
- Check the material for it's size and mill flaws.
- Shrink the material and press.
- Create the design for lettering on tracing paper of 4-6 cm height. Perforate the outer lines with a pin.

The actual measurement after finishing will be 40 x 40 cm.

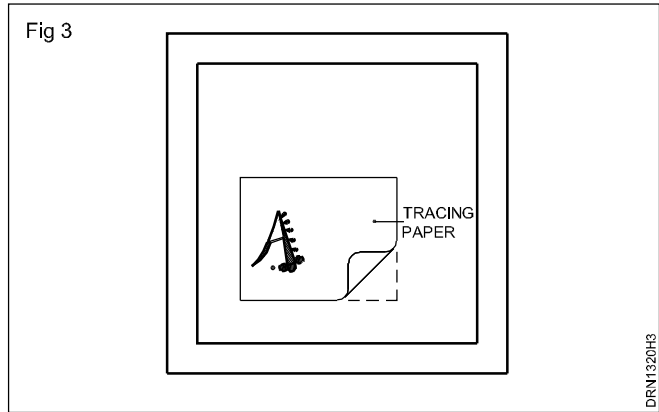
- Mark points a, b, c, d 4 cm from each edge and join them. (Fig 1)



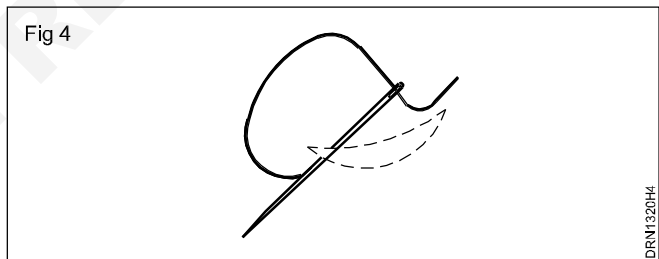
- Create a diagonal line from a to d by folding and pressing.
- Mark point 'e' at a distance of 10 cm from point 'a' on the diagonal line (position of monogram). (Fig 2)



- Set the centre of base of lettering on the point 'e' marked on cloth.
- Transfer the design on fabric using blue solution and swap. You can also trace a design with the help of carbon paper. In both cases, you have to draw design first on paper. (Fig 3)



- Remove one thread at a distance of 4 cm from all edges of the handkerchief. Remove 3 more threads towards the centre of cloth alternately on all sides.
- Fix the lettering traced portion of fabric in the centre of an embroidery frame and screw the frame carefully, keeping the cloth tight inside the frame.
- Determine the parts of lettering for different stitches using ie. stem, satin, chain, cross stitches, etc.
- Select the colour scheme of embroidery threads.
- Fill the portions marked for selected stitches and selected coloured thread.
- If you use satin stitch make first a border with running stitches. Then fill the marked portion with satin stitches covering the running stitches. (Fig 4)



- Finish the corners by hand.
- Finish the edges by hand using hem-stitch.
- Finish and press.
- Prepare other types of corners on a sample piece.

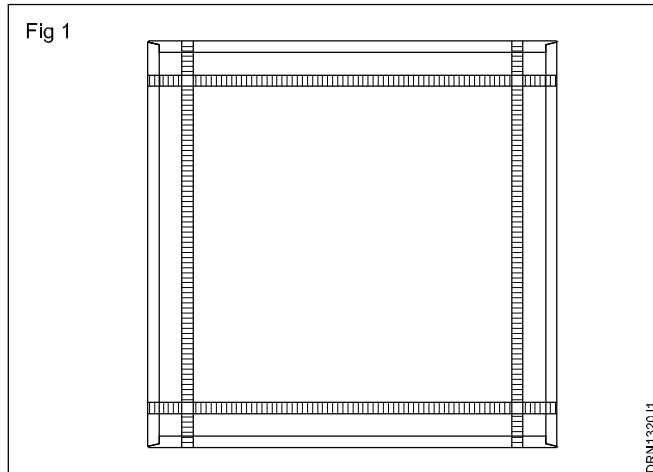
Skill sequence

Turned - out corner

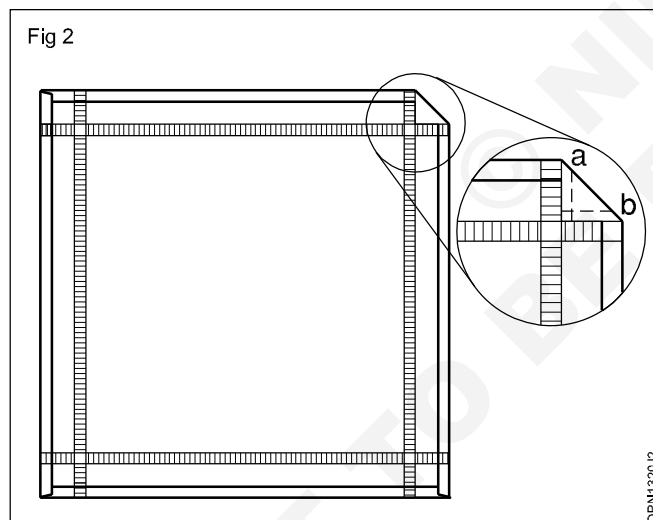
Objectives: This shall help you to

- make the corners of the handkerchief.

Turn edges of fabric 0.5 cm towards wrong side of the fabric on all edges. (Fig 1)



Fold corner and set the corner point on the corner of the hole created by removed threads. Fix with 2 stitches. (Fig 2)

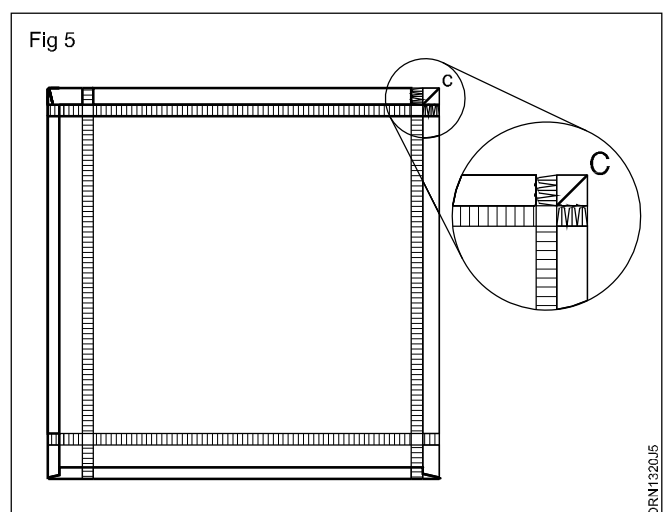
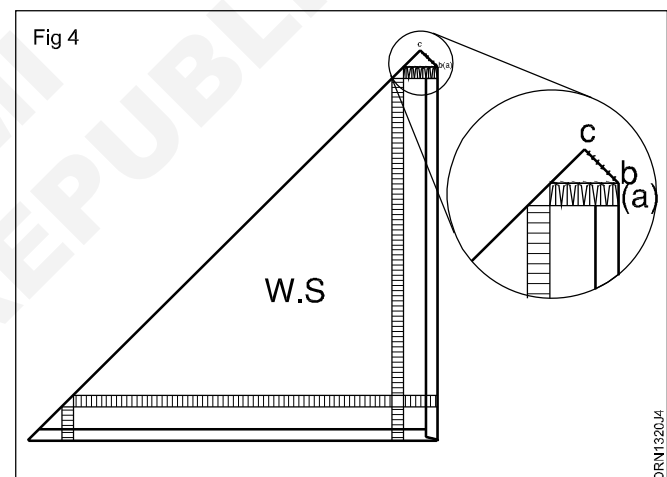
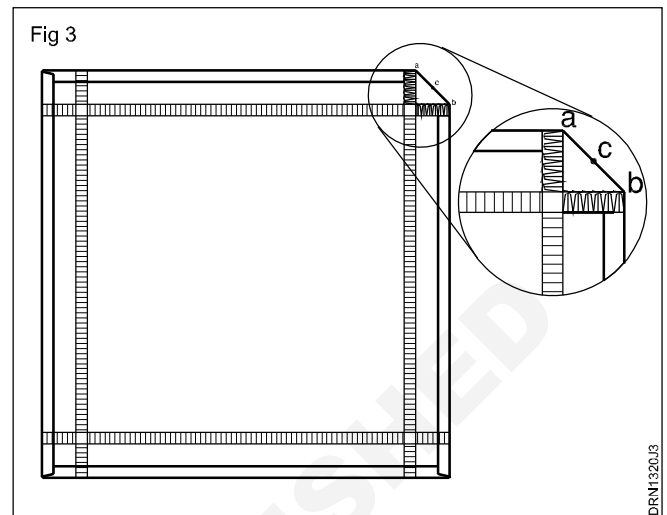


Stitch the turned edges of the corner with hem stitch (Fig 3)

Fold the handkerchief in that way that points a and b (Fig 3) will be joined and the right sides of fabric are together. Join the edges with whip stitch. (Fig 4)

Turn the edge inside out so that c will be on top of the edge. (Fig 5)

Repeat the same process for all the other corners.



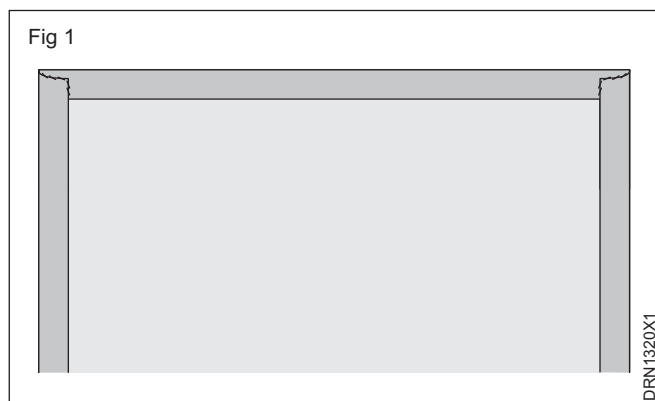
Overlapping and mitring corners

Objectives: This shall help you to

- prepare other types of corners: overlapping, self-turned-up mitring and mitring a flat tape.

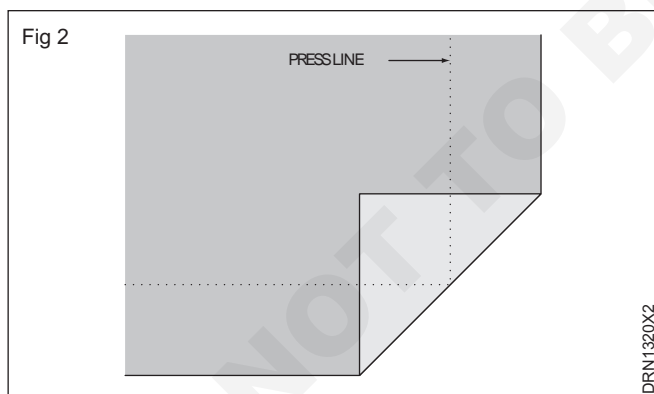
Cut the other piece of fabric (cambric cloth) of 45 x 45 cm in 4 equal pieces of 22.5 x 22.5 cm.

Overlapping corner: Take one of these pieces and fold widthwise edges (along the weft yarn) first by 0.5 cm, then by 1 cm. Hold the folds in shape with pressing. Then fold lengthwise edges (along the warp thread) in the same manner, so that the new folds will overlap the first ones at corners. Fix the corner and edges with whip stitches. (Fig 1)



Mitring corners: Mitring is the diagonal joining of two edges at the corner; the joint may be stitched or folded.

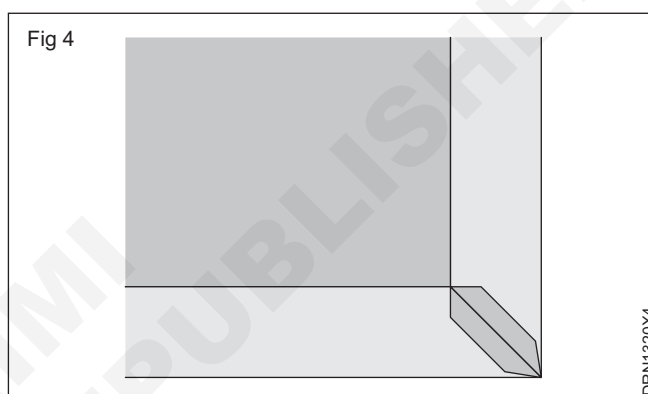
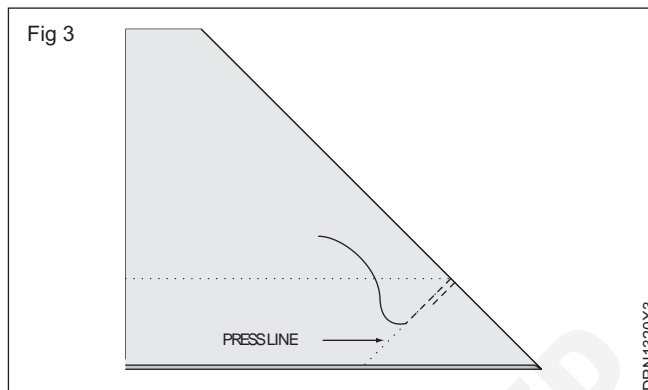
Mitring on self-turned-up corners: Take the second sample piece 22.5 x 22.5 cm and finish the corners as follows: Fold on seamlines of widthwise and lengthwise edges, press. Open out edges, fold the corner up, aligning creased lines. Press again. (Fig 2)



Open out the corner. Fold the garment diagonally (on bias) with right sides together and raw edges matching. Stitch on the diagonal press line. (Fig 3)

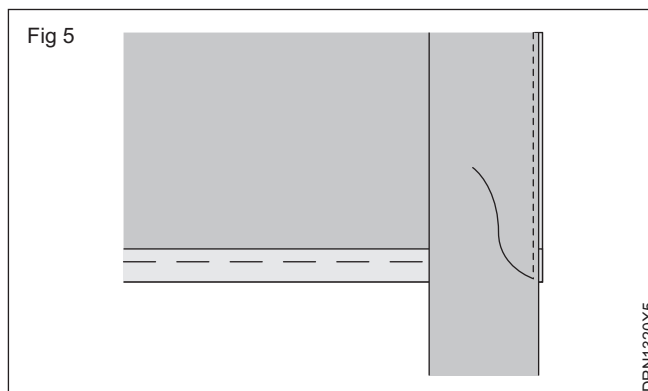
Trim the corner, leaving 5 mm seam allowance. Trim the corners of seam allowance separately so that they don't overlap. (Fig 4)

Press the seam allowance open and turn right side corner out. Finish for the remaining corners.



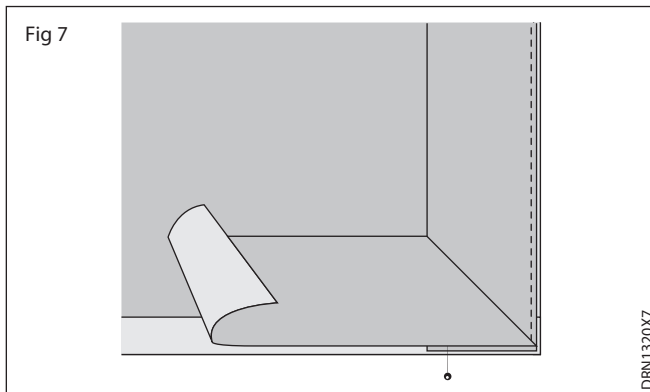
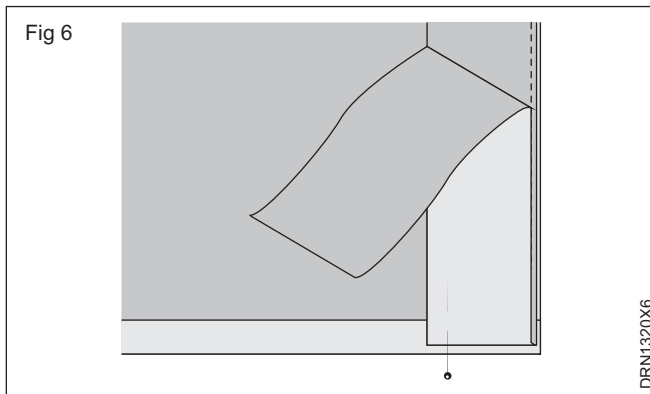
Mitring with flat tape/ribbon: Take a sample piece of 22.5 x 22.5 cm. Fold the raw edges on all sides by 6 mm to the right side. Pin and baste. Baste the outer edge of a ready made tape along one side of the sample piece.

Ensure that both outer edges are aligned together so that wrong side of the fold of the sample piece is not visible. Stitch close to the edge; stop slightly above the corner. (Fig 5)

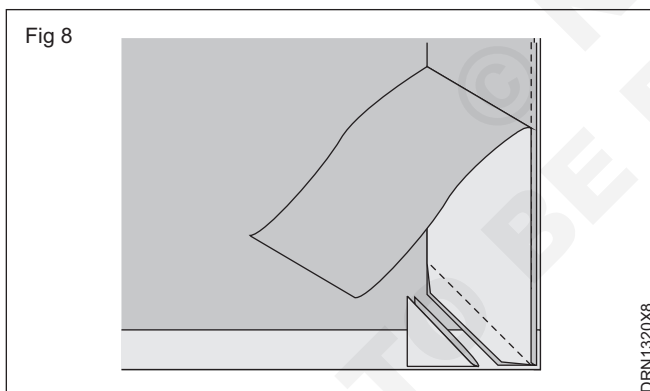


Pull the thread to the wrong side and knot. Fold the tape straight back on itself so that the fold of the tape aligns with lower edge of the sample piece. Pin at the fold to hold in place. (Fig 6)

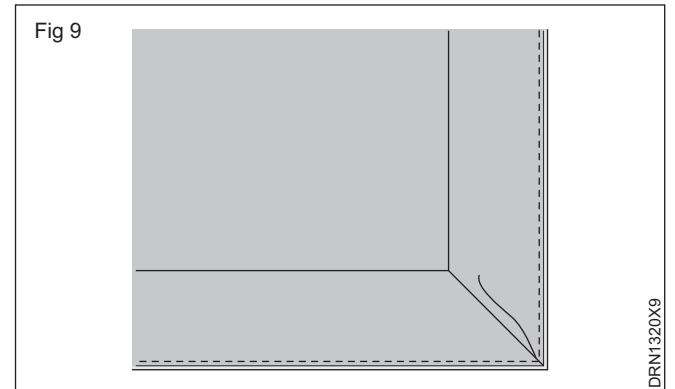
Fold the tape down and make a diagonal fold at corners aligning the outer edge of the tape with lower edge of the sample piece. Press on diagonal fold. (Fig 7)



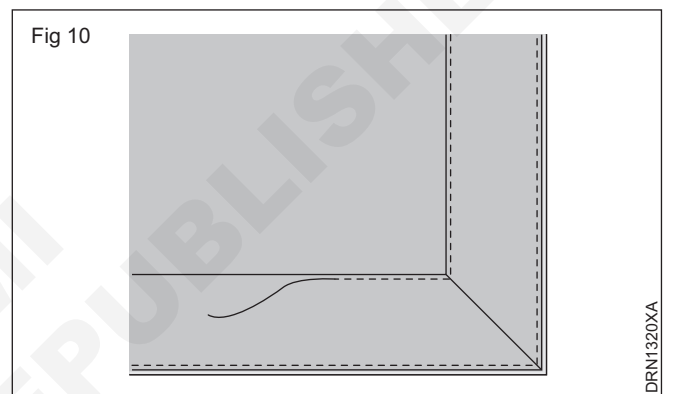
Lift the tape at corner and stitch on diagonal crease through all thickness. Trim the corner to reduce bulk and press the seam open. (Fig 8)



Again fold the tape back aligning its lower raw edge with the sample edge. Starting in last stitch at corner, stitch along the outer edge of tape. (Fig 9)



Pull the threads at corner to wrong side and knot. Then stitch along the inner edge of the tape. Press the tape and sample piece. (Fig 10)



Finish the other corners in the same manner.

Make samples of casing

Objectives: At the end of this exercise you shall be able to

- prepare fold down casing
- prepare applied casing
- prepare casing with draw string
- prepare casing with elastic
- prepare casing and heading.

Requirements

Tools/ Equipments

- Lock stitch sewing machine - 1 No.
- Iron box - 1 No.
- Hand needle - 1 No.
- Scissors - 1 No.
- Dress maker's pin - 1 box

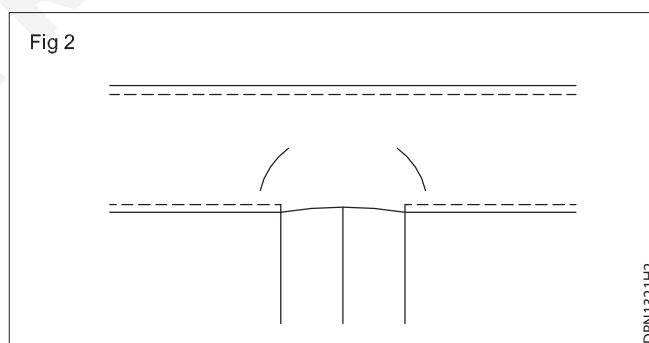
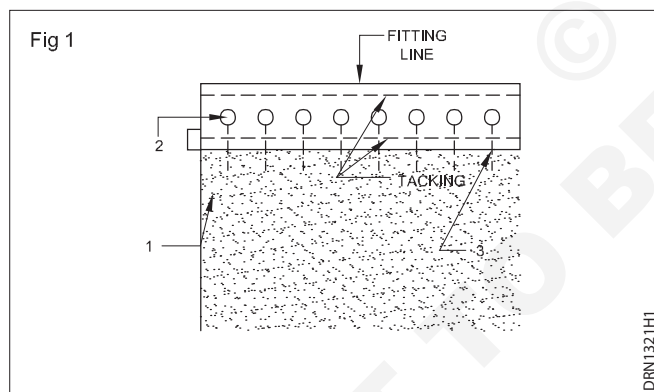
Materials

- Long cloth or poplin - 1 m
- Sewing thread - 1 No.

PROCEDURE

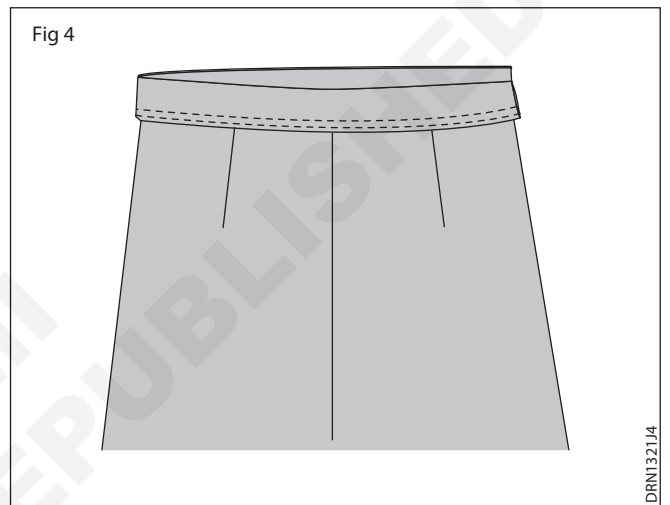
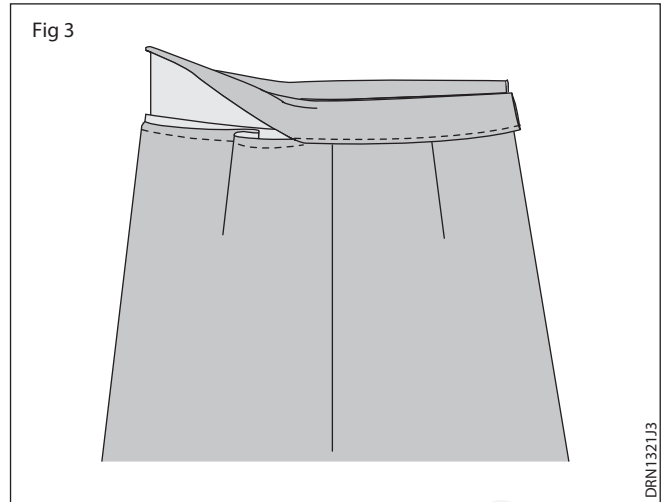
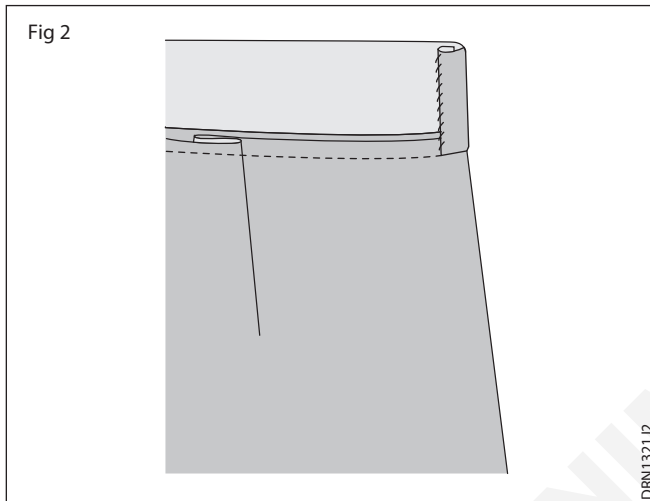
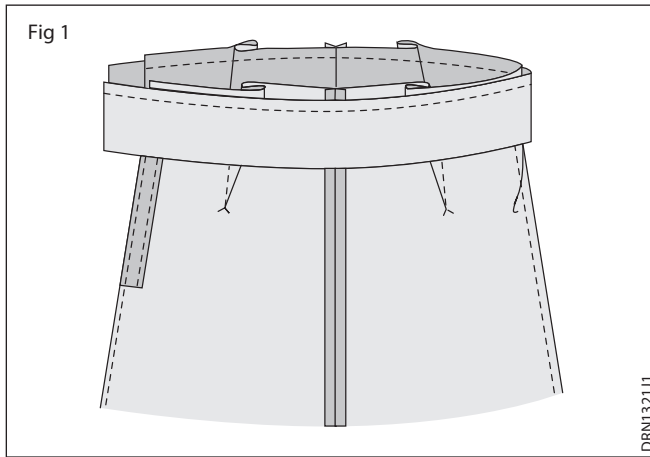
TASK 1: Fold down casing

- 1 Mark the fitting line, fold 1 cm to the wrong side.
- 2 Fold along the fitting line to make the tunnel.
- 3 Pin and tuck the casing, then press. (Fig 1)
- 4 Machine stitch along the upper and lower edges of casing.
- 5 Leave an opening of approx 4 cm on the lower edge
- 6 Back stitch at both the open ends of lower edge. (Fig 2)



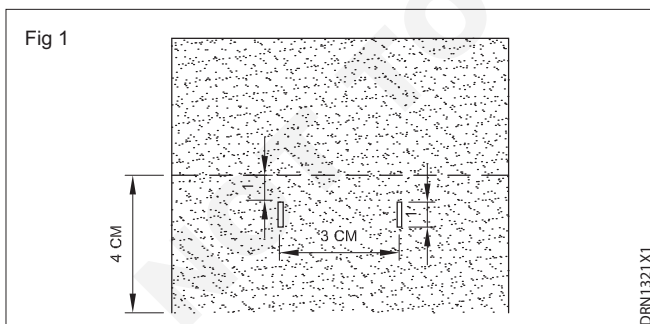
TASK 2: Applied casing

- 1 Place and pin the casing on waistline, right side of casing and wrong side of petticoat together. Start to pin from placket. Take care that balance marks on casing match the side seamlines and the centre of petticoat. Baste and stitch at a distance of 0.75 cm from raw edge. (Fig 1)
- 2 Turn the petticoat to right side and fold the casing up (i.e. turn by 180°). Press the seam allowance flat to casing piece.
- 3 Finish the raw edges of casing on sides. Turn the edge first by 0.5 cm and then by 1 cm. Hem, covering the seam allowance. (Fig 2)
- 4 Fold down casing on the centre line and pin the casing on the right side covering the previous seam line. Match the balance marks with side seam lines of the petticoat. Baste and top stitch through all layers. (Fig 3)
- 5 Top stitch a parallel stitch line at a distance of 0.5 cm.
- 6 Keep the material under needle and pressure foot, lift the presser foot and pivot material by 90°, stitch 0.5 cm up, pivot material again etc. (Fig 4)

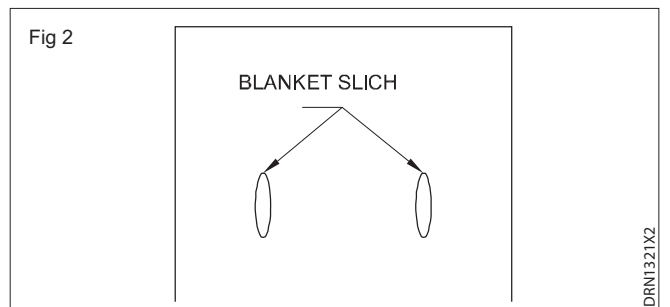


TASK 3: Casing with draw string (Figs 1 to 5)

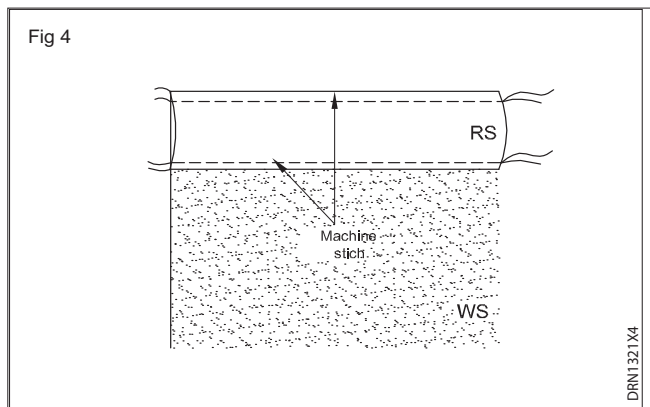
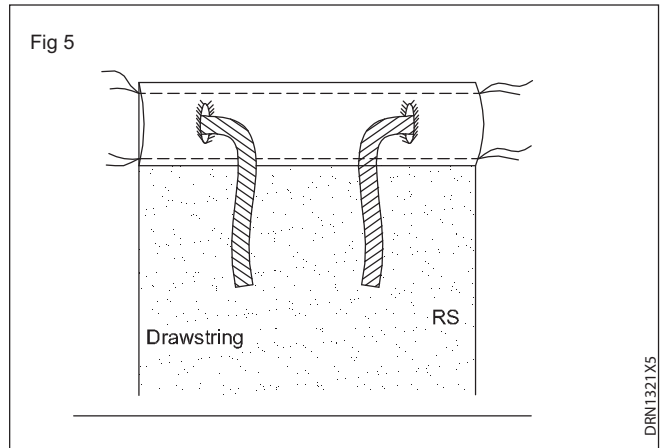
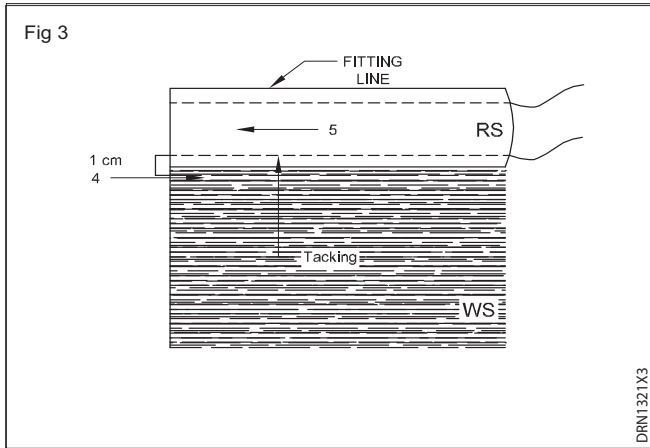
- 1 Mark the fitting line.
- 2 Mark and cut two holes for the draw string.



- 3 Finish the holes with blanket/ button hole stitch.
- 4 Fold 1 cm to the wrong side (First turning).
- 5 Fold along the fitting line to make second turning.
- 6 Pin, tack and press.

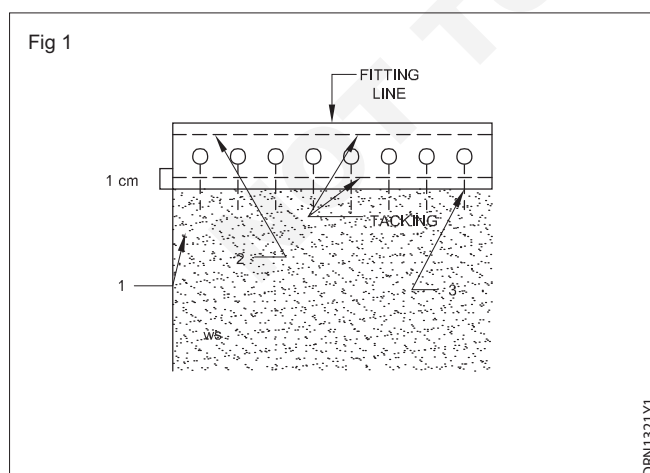


- 7 Machine stitch along the upper and lower edges of the casing.
- 8 Remove tacking.
- 9 Insert the draw string from one hole.
- 10 Push it through casing and draw it out from the other hole.

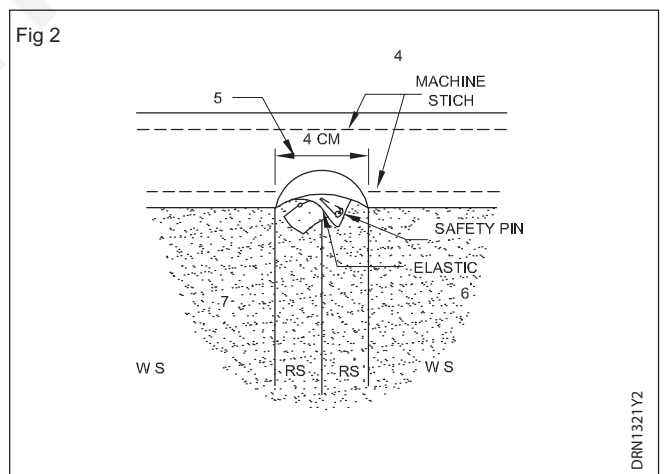


TASK 4: Casing with elastic (Figs 1 to 4)

- 1 Mark the fitting line, fold 1 cm to the wrong side.
- 2 Fold along the fitting line to make the tunnel.
- 3 Pin and tuck the casing, then press.
- 4 Machine stitch along the upper and lower edges of the casing.

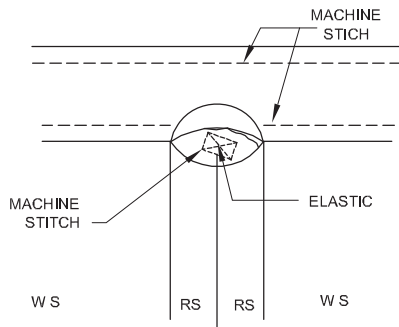


- 5 Leave an opening of approx 4 cm on the lower edge and remove the tacking.
- 6 Attach a safety pin to one end of the elastic.



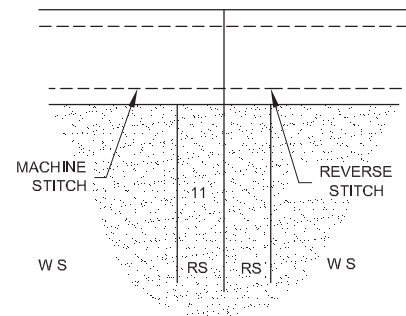
- 7 Pin the other end of elastic to the garment.
- 8 Push the safety pin with the elastic through casing.
- 9 Remove safety pin, secure the ends of elastic by placing ends one over other and make a square stitching.
- 10 Machine stitch along the lower edge of the opening to close the casing.
- 11 Spread the gathers evenly in the casing.

Fig 3



DRN1321Y3

Fig 4

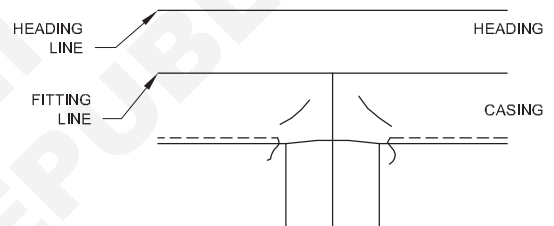


DRN1321Y4

TASK 5: Casing with heading

- 1 Mark the fitting line. Mark heading line as per desired width of heading.
- 2 Fold 1 cm to the wrong side.
- 3 Fold along the fitting line to make the tunnel.
- 4 Pin and tuck the casing, then press.
- 5 Machine stitch along the lower edge as per desired type of casing.
- 6 Stitch along the fitting line leaving heading width as it is (Fig 1)

Fig 1



DRN1321Z1



Scan the QR Code to view
the video for this exercise

Make samples of edge finishing

Objective: At the end of this exercise you shall be able to

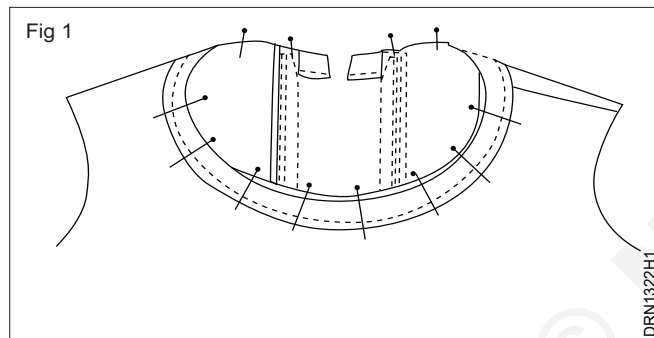
- **finish the neckline using facing, binding, piping.**

PROCEDURE

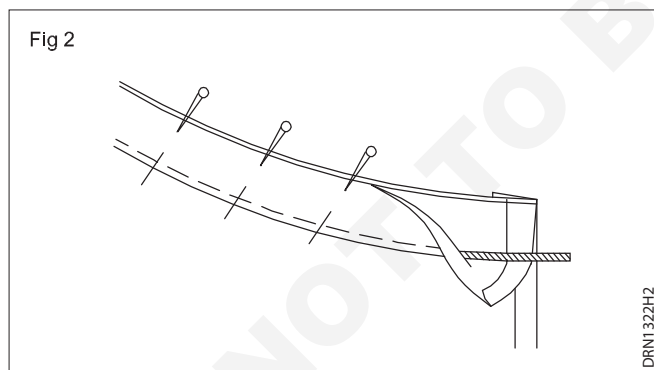
TASK 1: Piping or cording

Working method of piping

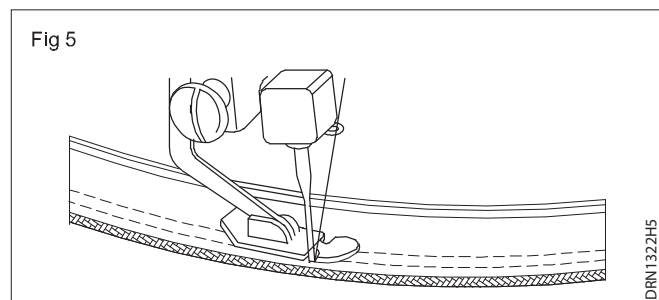
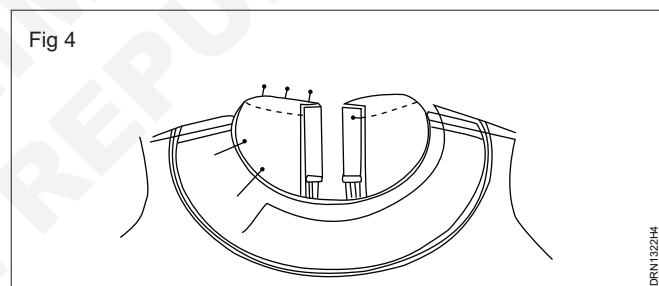
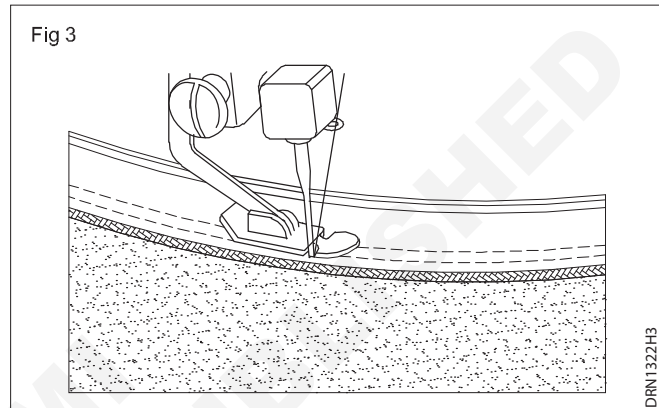
- 1 Measure the shape neckline and cut piping or cording piece of length 3cm to 4 cm than the neckline measurement and 3cm wide.
- 2 Open the placket or zipper, pin the cording to right side of garment with cord just outside seam line and the cording stitch line just inside seam line leave excess cording at ends.(Fig 1)



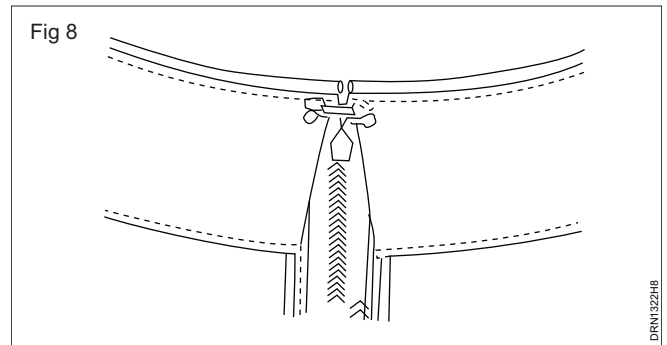
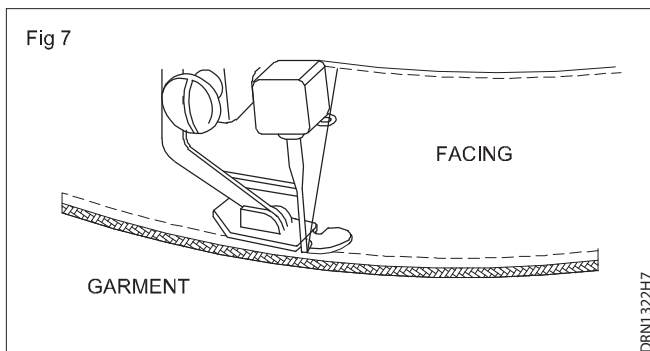
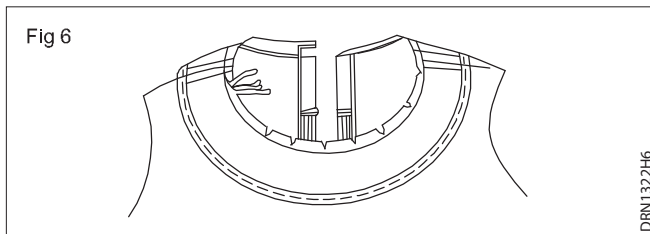
- 3 At ends, release enough of stitching adding cord to open fabric, and then cut cord to even with placket edges. Trim fabric ends to 6mm. (Fig 2)



- 4 Remove tacking. Tack cording to garment, remove pins. Using a zipper foot adjust to right of needle. Stitch cording to garment. Stitch between cord and the stitching encasing the cord.(Fig 3)
- 5 Remove tacking. Construct facing with right sides together, pin and tack to garment. Warp ends of facing around zipper halves to inside of garment. (Fig 4)
- 6 With wrong side of garment up stitch facing to garment along seam line (Fig 5)



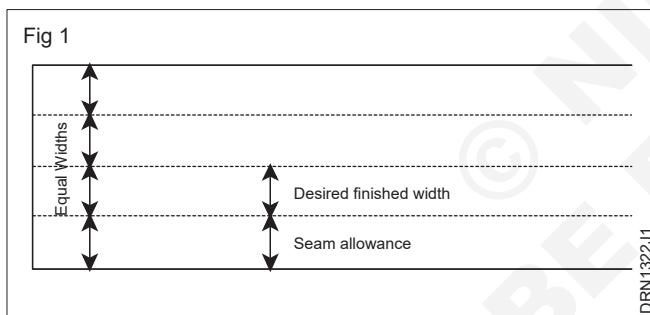
- 7 Press seam flat. Trim the seam allowances diagonally at cross seams and corners. Press seam open and then press facing and seam allowances away from garment. (Fig 6)
- 8 Extending facing and seam allowance away from the garment, under stitch along neck seam line. Use zipper foot stitch from right side of facing through all seam allowances. (Fig 7)
- 9 Turn facing to inside and press. Tack facing to garment at shoulders. Tack fabric at ends of cording closed slip stitch facing ends to zipper tapes. Attach fasteners. (Fig. 8)



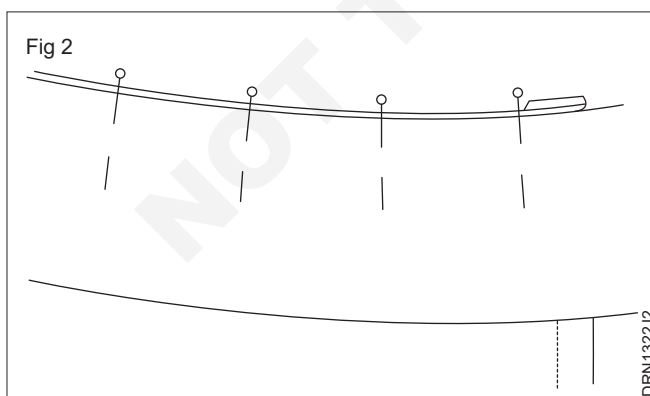
TASK 2: Binding

Working method of single layer binding

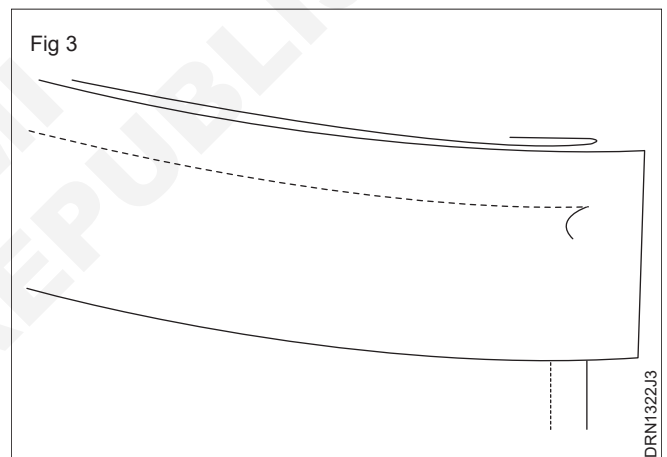
- 1 For a single layer binding cut binding of four times the desired finished width and the length of the neck seam line + 5cm. (Fig 1)



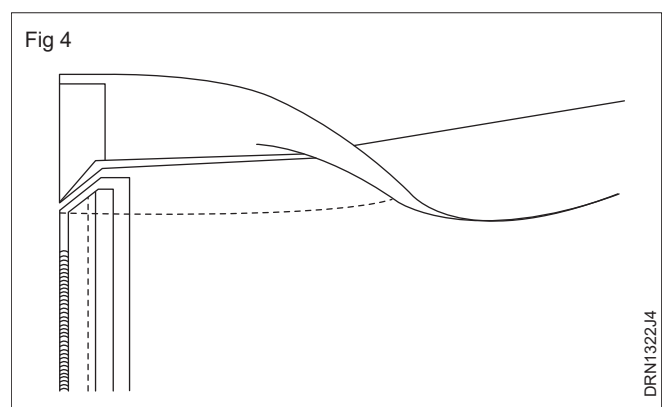
- 2 Open zipper. Place the binding over the garment with their right sides facing each other. Pin it after checking for correct matching of neck shapes. (Fig 2)



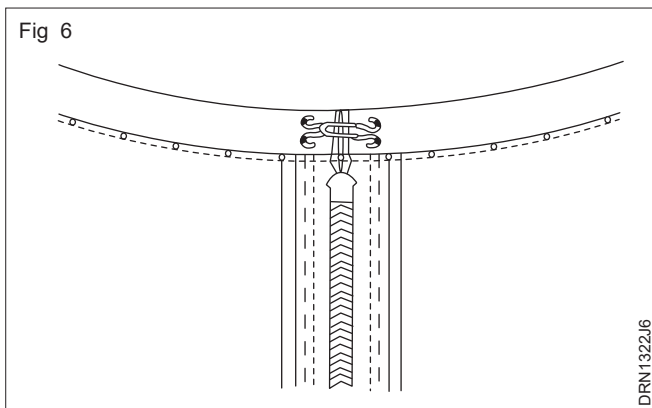
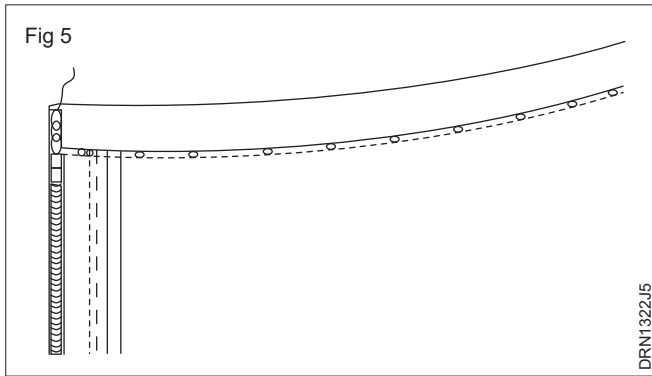
- 3 Stitch the binding to garment along the seam line. Remove pins and trim excess binding at ends to 1cm. (Fig 3)



- 4 Fold ends of binding back, even with placket edges. Trim across corners. Bring binding up over the seam allowances to inside garment. (Fig 4)

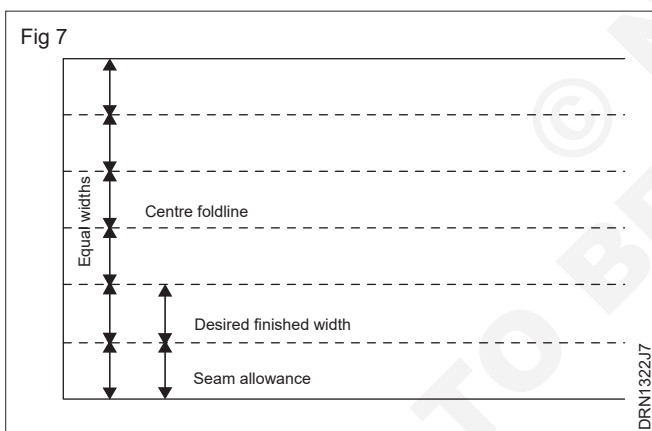


- 5 Fold the raw edge of the binding along the seam line. Pin in place. Slip stitch ends. (Fig 5)
- 6 From inside, press the neck edge. Close zipper and attach fastener. (Fig 6)

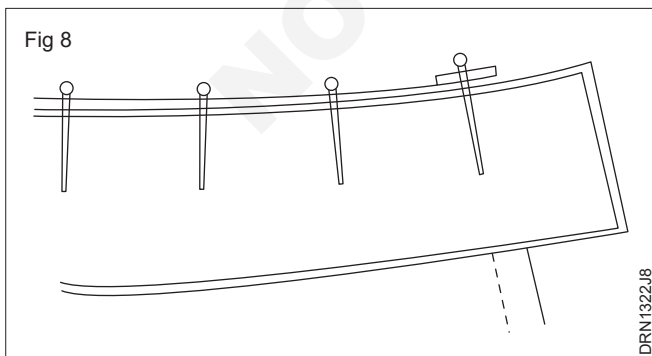


Working method of double layer binding

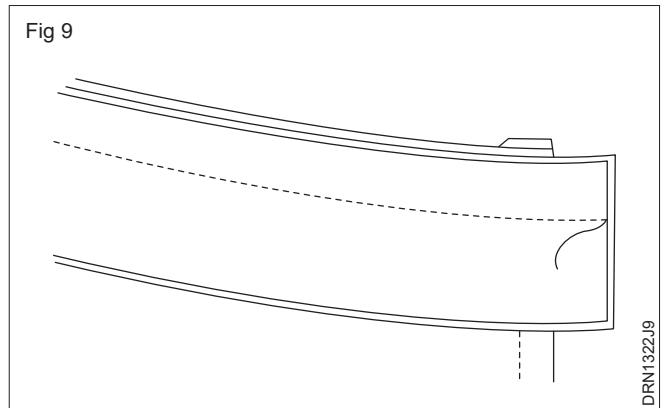
- 7 For double layer binding, cut the strip double the size of single layer binding. (Fig 7)



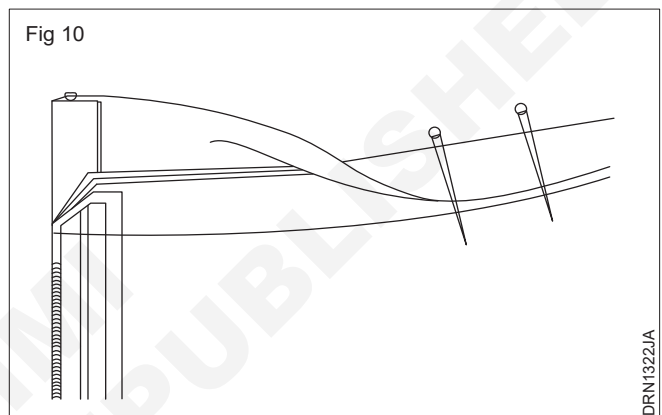
- 8 Open zipper. Right sides together pin the binding (Fig 8)



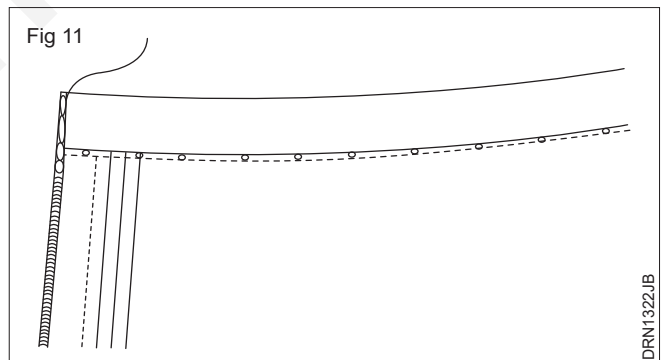
- 9 With binding up stitch to garment along the seam line removing pins. Trim excess binding at ends to 1 cm. (Fig 9)



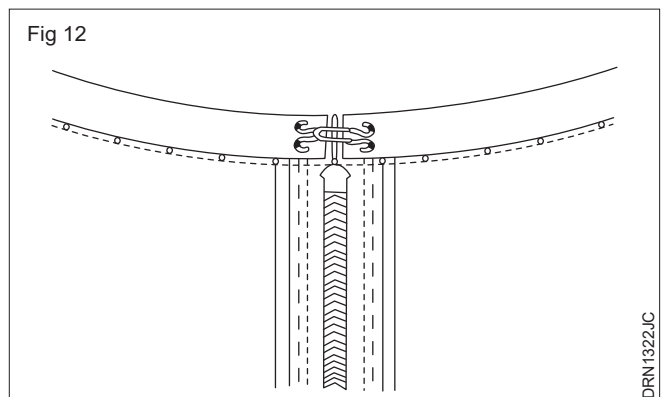
- 10 Folds ends of binding back even with placket edges. Trim across corners and cross - seam allowances. Bring binding up over seam allowances to inside of garment. Pin in place. (Fig 10)



- 11 Slip stitch ends of binding closed, slip stitch the folded edge of binding to garment along the entire neck seam line. (Fig 11)



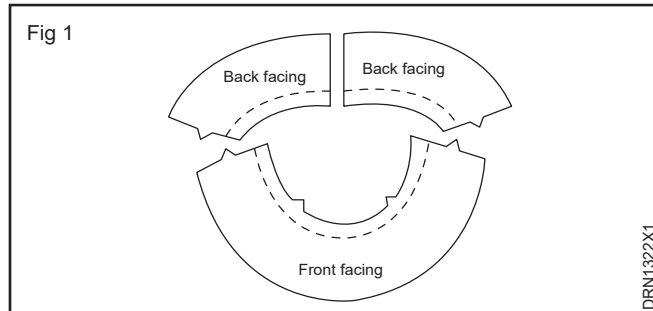
- 12 From the inside, press the neck edge. Close zipper and attach fasteners. (Fig 12)



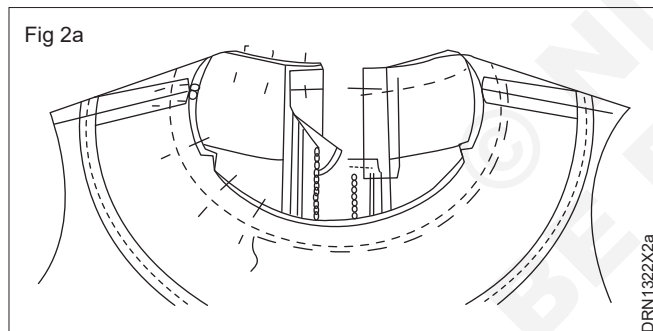
TASK 3: Facing

Working method of shaped facing

- 1 Draw the shape of the edge to be finished. (i-e) neckline in a brown paper.
- 2 With this neck outline as base measure about 5cm (facing piece width) all around the shaped neckline and draw complete the facing piece pattern. (Fig. 1)

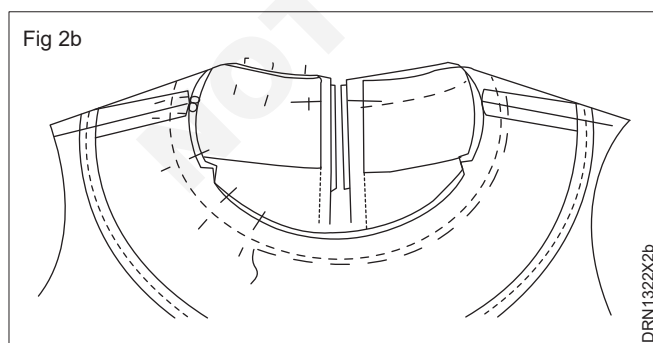


- 3 Using pattern cut the facing piece from the remaining fabric.
- 4 Place the facing over the neckline of the garment with its right sides facing each other and pin it and tack it.
 - i If zipper has been inserted open zipper and warp ends of facing to inside around each zipper. Half tack facing to garment along neck seam line. (Fig 2a)



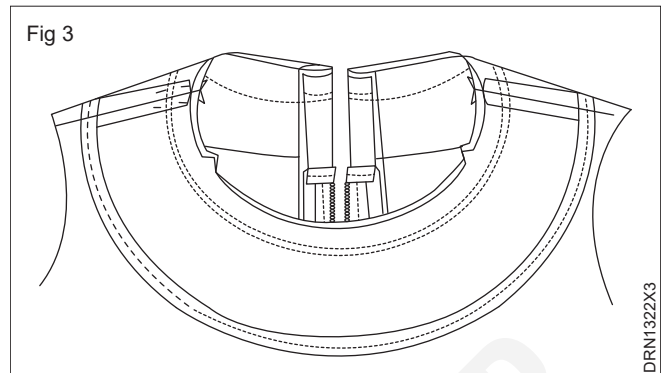
- ii If zipper has not been inserted:

Facing ends can be handled by keeping centre back seam allowances of both facing and garment extended the pin and tack them together in position. (Fig 2b)

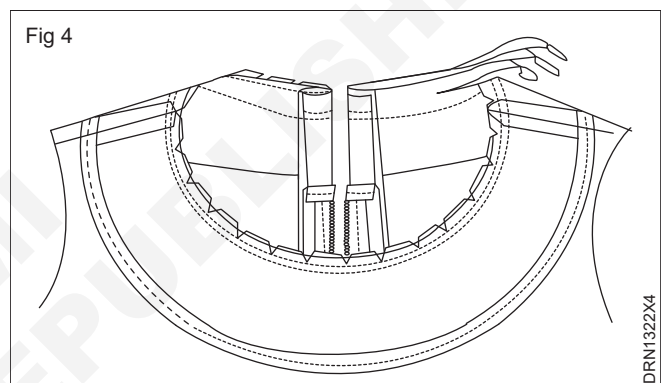


If the neckline is of square shape, apply the facing in the same way but reinforce the corners by short stitches for 2cm on both sides of each corner.

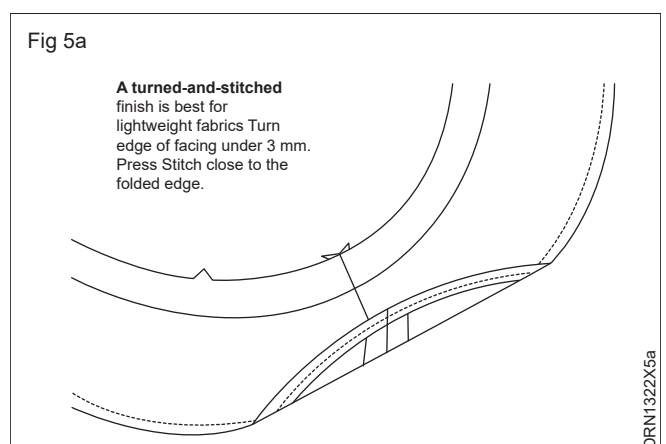
- 5 With facing side up, facing to garment along the neck seam line. Strengthen stitches at both ends. Remove tacking. (Fig. 3)



- 6 Trim the seam allowances as shown in fig to bring cut perfect neck shape. (Fig. 4)



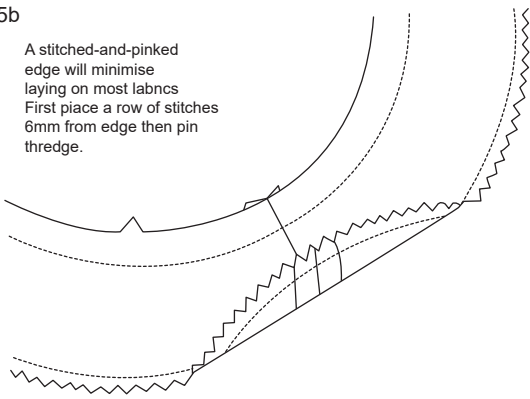
- 7 Turn facing to inside of the garment, check whether the centre front or centre back of the facing coincide with the garment for correct shape and press it.
- 8 Work out the other end of the facing using any one of the shown method
 - i A turned and stitched. (Fig 5a)



- ii A stitched and pinked. (Fig 5b)
- iii Using bias binding (Fig. 5c)

Fig 5b

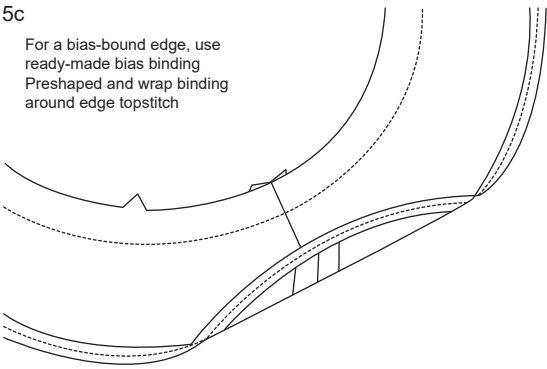
A stitched-and-pinked edge will minimise laying on most fabrics. First place a row of stitches 6mm from edge then pin thread.



DRN1322X5b

Fig 5c

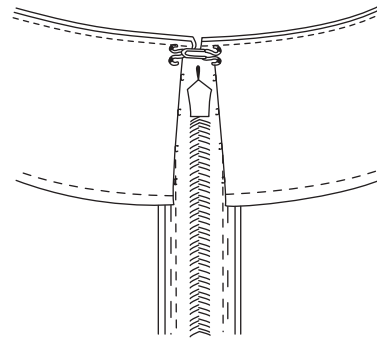
For a bias-bound edge, use ready-made bias binding. Preshaped and wrap binding around edge topstitch



DRN1322X5c

- 9 With ends folded under, stitch a row of machining to finish the neckline facing. (Fig 6)

Fig 6



DRN1322X6

Making samples of different shaped neck lines

Objectives: At the end of this exercise you shall be able to

- draw different neck line shapes
- finish the neck line edges by facing.

Requirements

Tools/Equipments

- Lock stitch sewing machine - 1 No.
- Iron box - 1 No.
- Hand needle - 1 No.
- Scissors - 1 No.
- Dress maker's pin - 1 No.
- Pencil - 1 No.
- Eraser - 1 No.

Materials

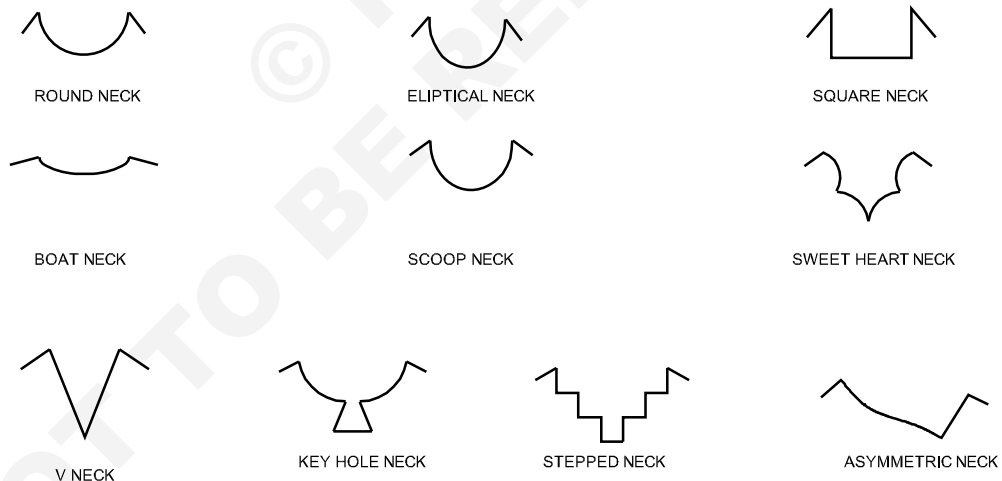
- Long cloth - 1.5 m
- Sewing thread - 1 No.
- A4 size paper - 3 Nos

PROCEDURE

TASK 1 : Draw different neck line shapes

- 1 Takes one A4 size sheet
- 2 Practice the following neck line shapes with the help of HB pencil (Fig 1)

Fig 1



DRN1423H1

TASK 2: Finish the neck line edge by facing

- 1 Cut the neck line shapes with shoulder in a fabric.
- 2 Finish the neck line edges by facing (Refer Ex. No. 1.2.12)

Get the work checked by your instructor

Objectives: At the end of this exercise you shall be able to

- make sample of a faced placket
- make sample of two piece placket for waist line
- make sample of continuous placket
- make sample of Italian placket
- make sample of two piece placket for upper garment
- make sample of one piece placket.

Requirements

Tools/Instruments

- Single needle lock stitch machine - 1 No.
- Hand needle - 1 No.
- Scissors - 1 No.
- Dress maker's pin - 1 Box

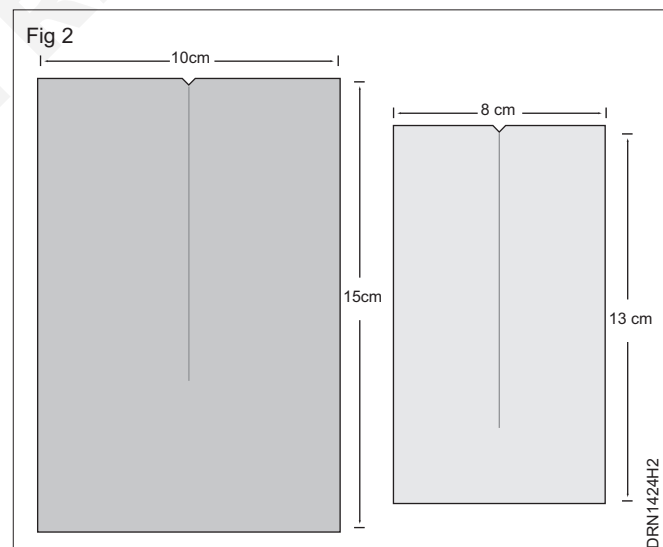
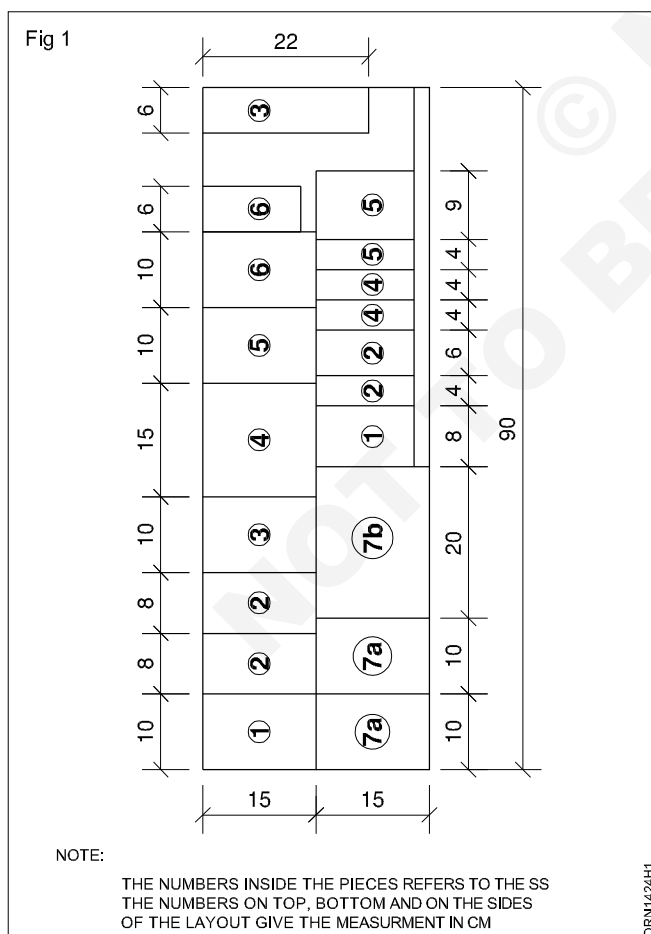
Materials

- Long cloth or muslin - 0.30 x 0.90 m
- Sewing thread - 1 No.

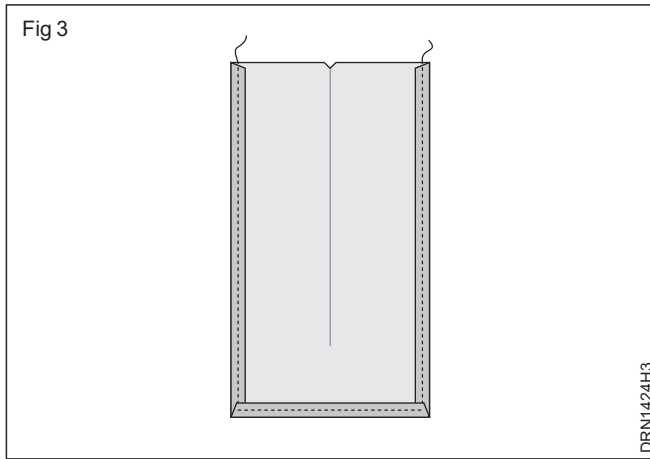
PROCEDURE

TASK 1: Construct a faced placket

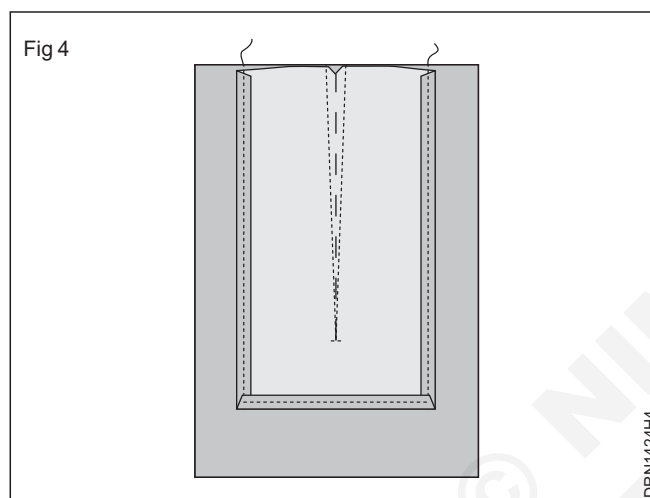
- 1 Cut the material for all the samples plackets as per given layout. (Fig 1)
 - 2 Take two pieces of fabric 15 cm x 10 cm (sample) and 13 cm x 8 cm (facing).
 - 3 Draw 10 cm long lines on the right side of the sample piece and on the wrong side of the facing piece. Mark in the centre of both. (Fig 2)



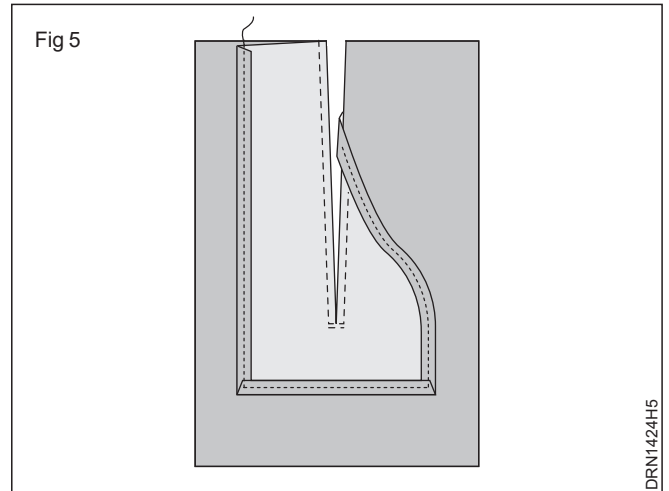
- 4 Turn the edges of facing by 1 cm and leave the top edge. (Fig 3)
- 5 Place facing piece on sample piece with right sides together. Match the centre lines and baste on the line.
- 6 Mark 5 mm on both sides of the centre line on the top edge. Join the two marks with bottom end of centre line in V-shape.



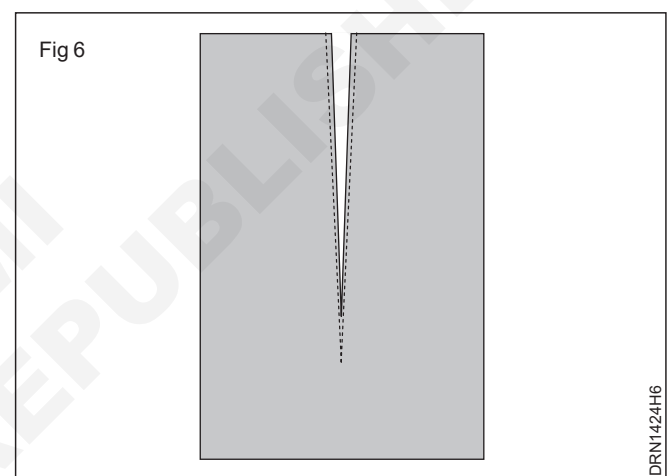
- 7 Stitch over the lines which form V-shape. Start on top, stitch down to peak point, take 2 stitches horizontally and stitch back on other line up to top. (Fig 4)



- 8 Slash on the centre line leaving 2 mm at peak point. Turn the facing on the wrong side and press it gently to make out the edge. (Fig 5)

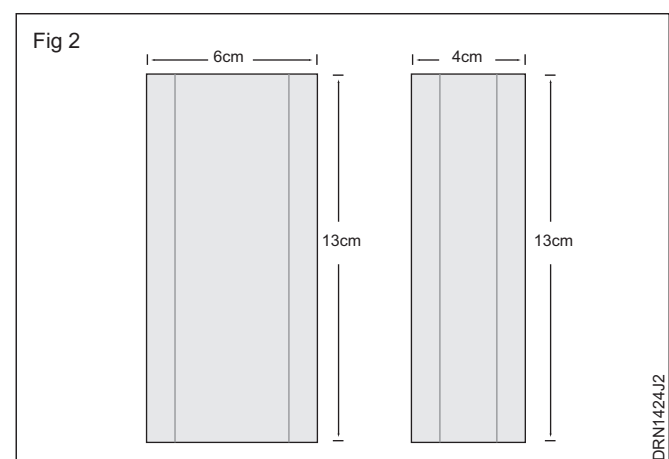
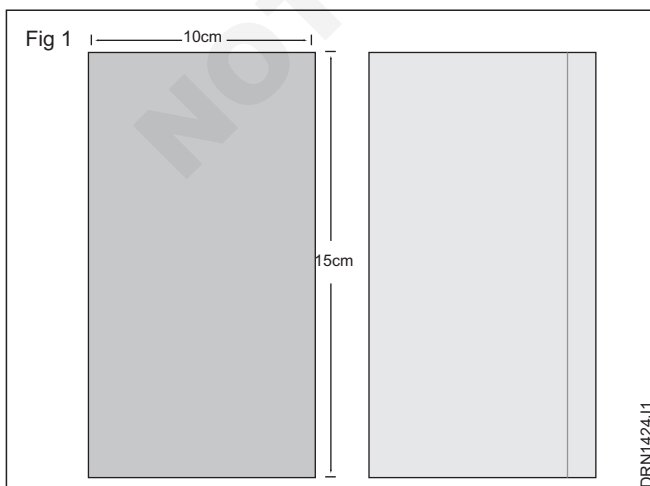


- 9 Stitch top seam from right side on the edges of the placket outlines. (Fig 6) Trim the ends of threads and press it.

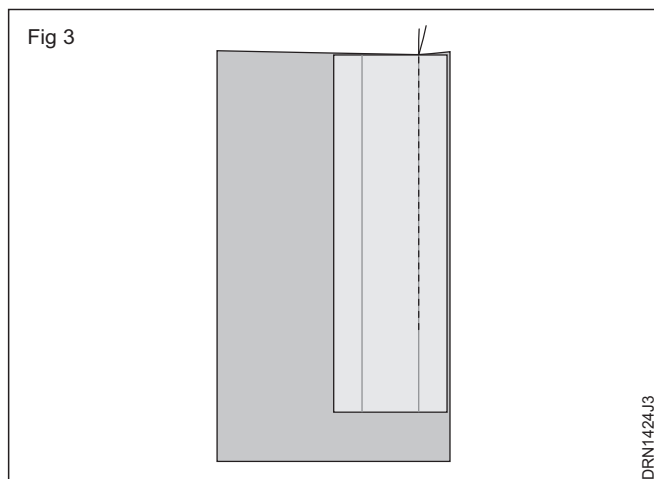


TASK 2: Construct a two-piece placket (for waistline)

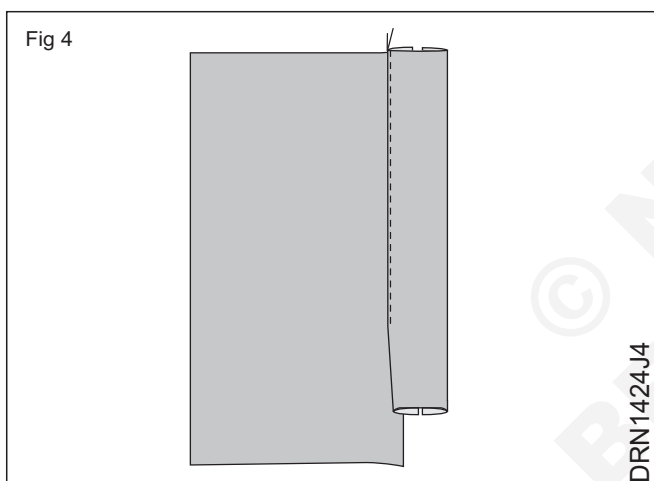
- Take 2 sample pieces of 15 x 8 cm and mark the seam line on wrong side leaving 1 cm seam allowance. (Fig 1)
- Take 2 facings of 13 x 6 cm and 13 x 4 cm and mark seam allowance on the wrong side of both pieces at a distance of 1 cm from both sides. (Fig 2)



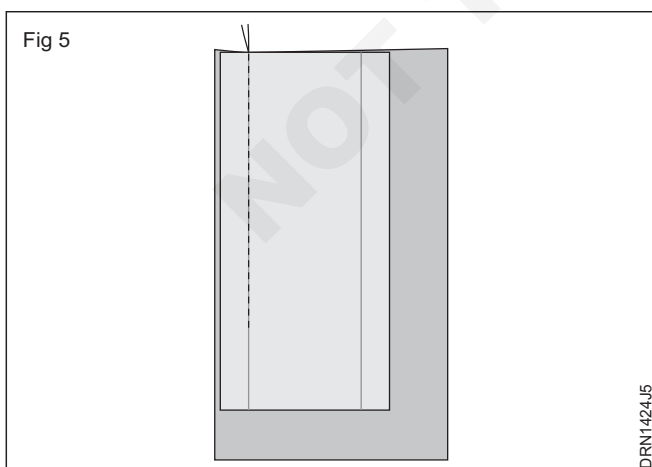
- 3 Take one sample piece and fix smaller facing (13 x 4 cm) on the right hand side with right sides of fabric together. Baste and stitch on the seam line up to 10 cm length. Lock seam at the end. (Fig 3)



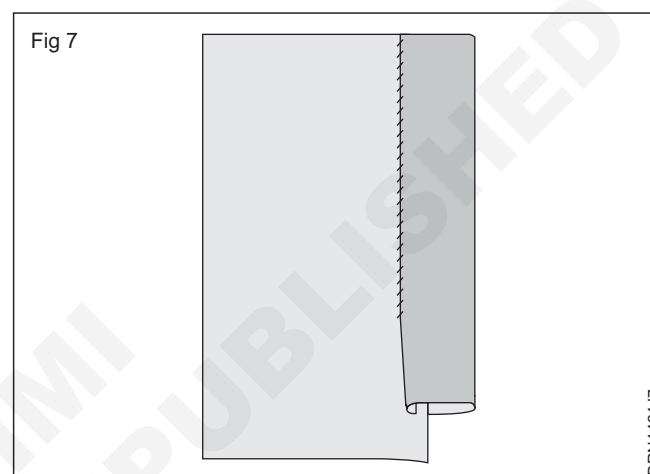
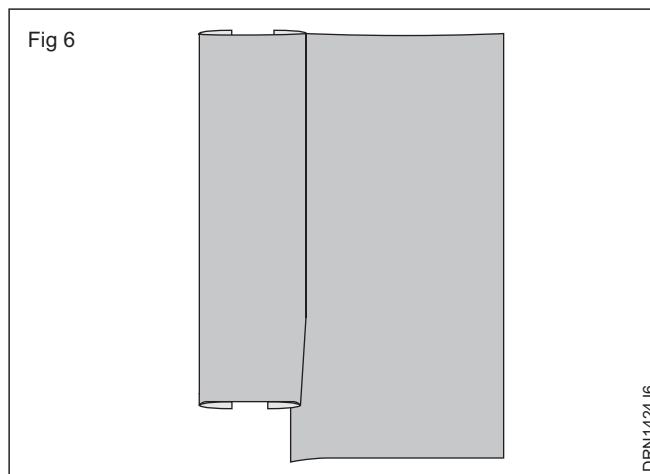
- 4 Fold raw edge of placket piece by 1 cm on the wrong side. Turn the facing by 180°, right side upwards. Press and stitch close to the edge up to the length of seam line (Fig 4)



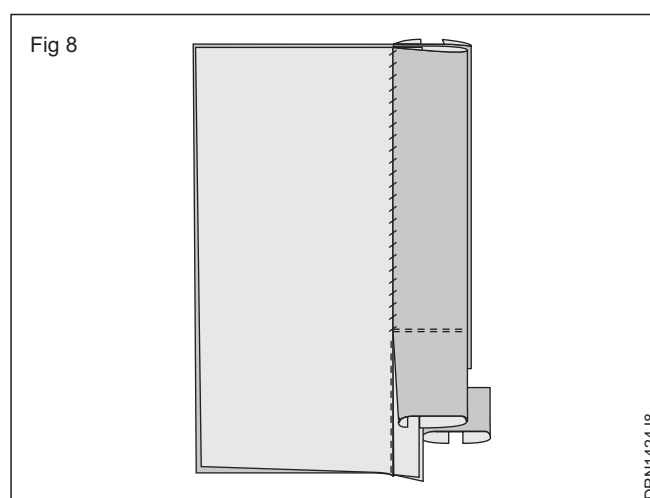
- 5 Repeat the same process for other sample and facing piece, but don't top stitch from the right side of the fabric. (Fig 5 and 6)



- 6 Turn to the wrong side. Roll over the turned edge of bigger facing on the seam line and hem the edge along the seam. (Fig 7)

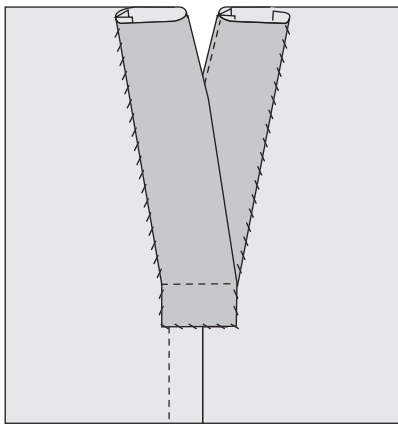


- 7 Place the 2 sample pieces one over the other with right sides together. The sample with bigger facing has to be on top. Join them on the remaining unstitched seam line; first baste, then stitch with machine on the seam line. Lock the placket at the end of the seam line with 2 rows of stitches. (Fig 8) Trim the smaller piece of facing at the bottom.



- 8 Unfold the 2 sample pieces with wrong side up. Set the smaller facing on the sample piece and hem the loose edge. Turn under the raw edge of the bigger facing piece at the bottom and hem to sample pieces. (Fig 9)
- 9 Variation of two-piece placket for petticoat.

Fig 9



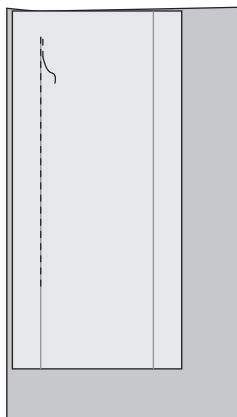
DRN1424J9

10 The following variation of the 2-piece placket (waistline) is used in petticoats. You can apply the method in the next exercise or you stitch it separately using the leftover material of exercise 5 and 11 for example.

11 Follow the process as described above up to Fig 4.

12 Take the other sample as described above and facing pieces, stitch on the seamline but stop 1 cm before the upper edge. (Fig 10)

Fig 10

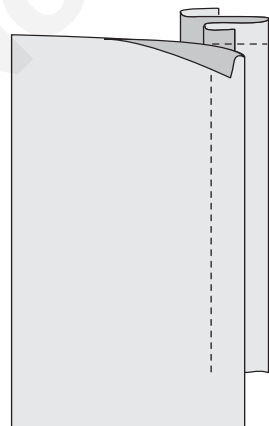


DRN1424JA

13 Fold raw edge of the facing to wrong side by 1 cm. Turn facing by 180°, with right side upwards. Press on the seamline and turn the piece with wrong side up.

14 Fold the facing back on centre line with right sides together, covering the previous seamline. Baste and stitch on top portion of facing only. Take care to fold back the sample piece. (Fig 11)

Fig 11



DRN1424JB

15 Clip the seam allowance of the sample piece on top of the seamline diagonally. (Fig 12)

16 Turn the facing inside out. Set loose edge on the previous seamline and hem it. (Fig 13)

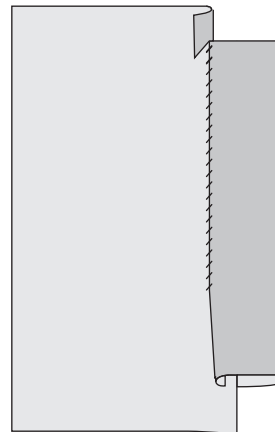
17 Place the two sample pieces one over the other with right sides together. The sample with the bigger facing must be on top. Join the two sample pieces in the lower part on the remaining unstitched seamline. Lock the placket at the end of the seamline with 2 rows of stitches. (Fig 14)

Fig 12



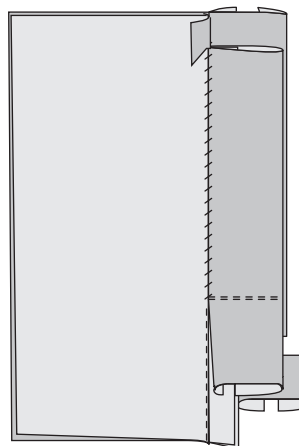
DRN1424JC

Fig 13



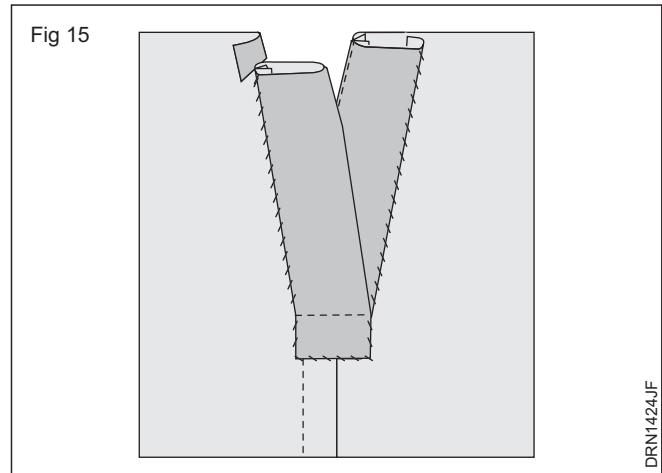
DRN1424JD

Fig 14



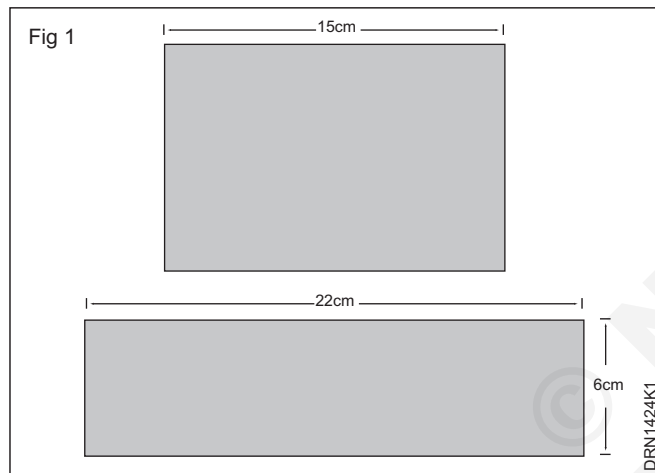
DRN1424JE

- 15 Unfold the two sample pieces with wrong side up. Set the smaller facing on the sample piece and hem the loose edge. Trim the smaller facing at the bottom. Turn under the raw edge of the bigger facing at the bottom and hem it to the sample pieces. (Fig 15)

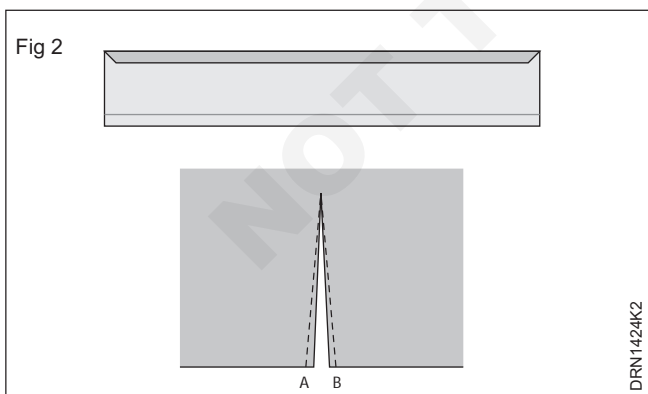


TASK 3: Construct a continuous placket

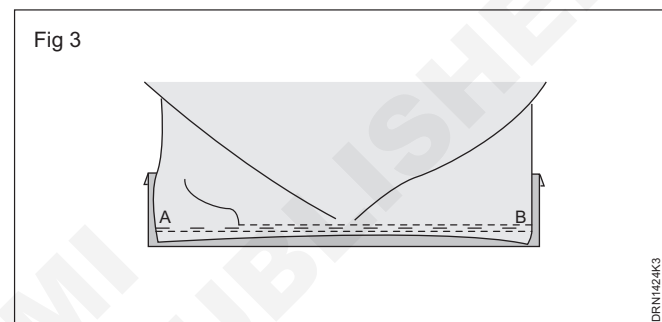
- 1 Take two pieces of fabric: one 15 x 10 cm (sample) and the other piece 22 x 6 cm (facing). (Fig 1)



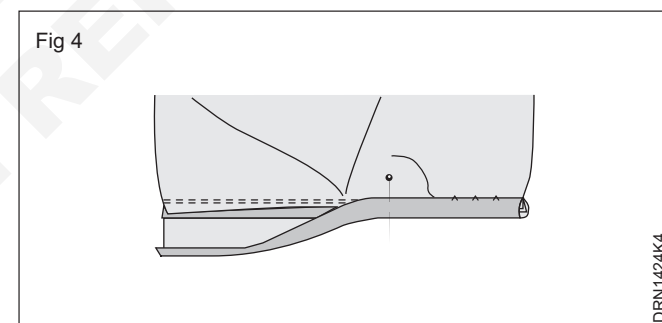
- 2 Turn the long edge of the facing piece by 1 cm to wrong side. Mark 5 mm from either side of the centre line on bottom. Join the marks with the top point of centre line in V-shape. Stitch on V-shape for reinforcement.
- 3 Slash on the centre line (Fig 2)



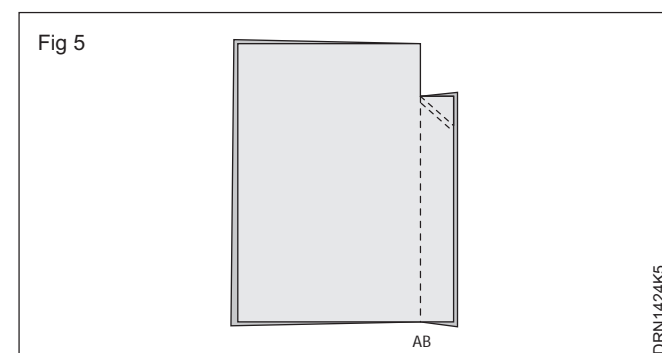
- 4 Spread open the slashed portion. Tack the facing along the slashed edge of the sample piece, leave 1 cm on each side with the right sides of both the pieces together. Stitch. (Fig 3)



- 5 Turn the folded edge of placket piece over the seam covering the seam allowance, tack and hem. (Fig 4)

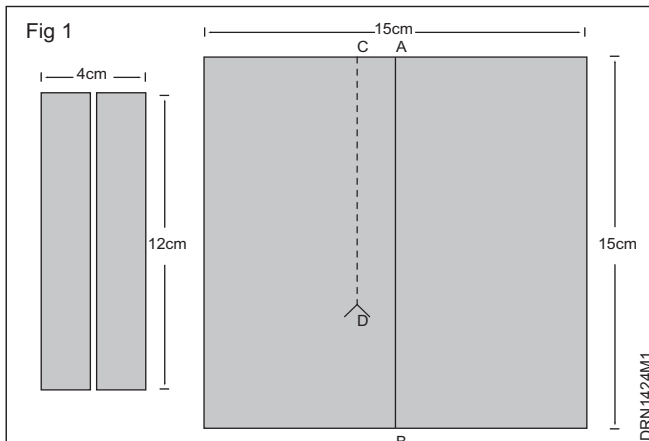


- 6 Fold the piece on centre i.e. on the slashed line keeping right side of the fabric inside.
- 7 Make diagonal tack (twice) on the folded end of the placket. (Fig 5)

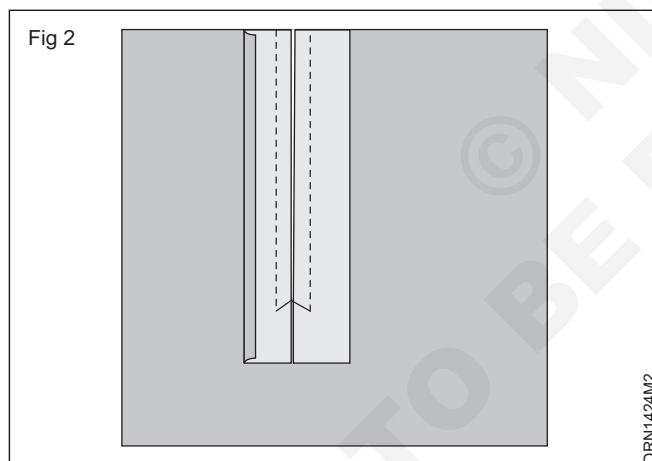


TASK 4: Construct an Italian placket (hemmed placket)

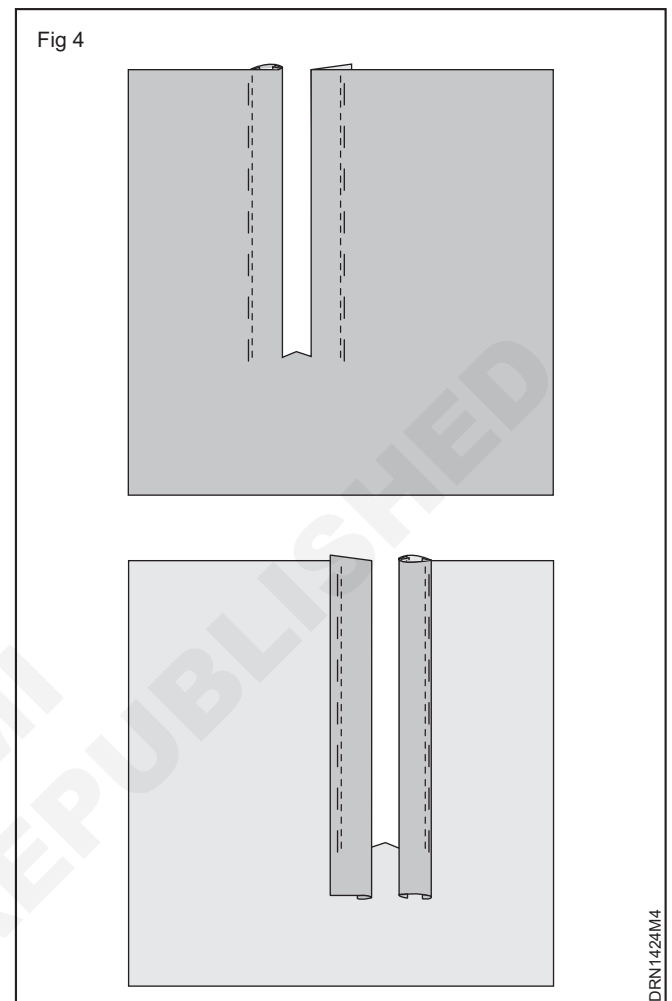
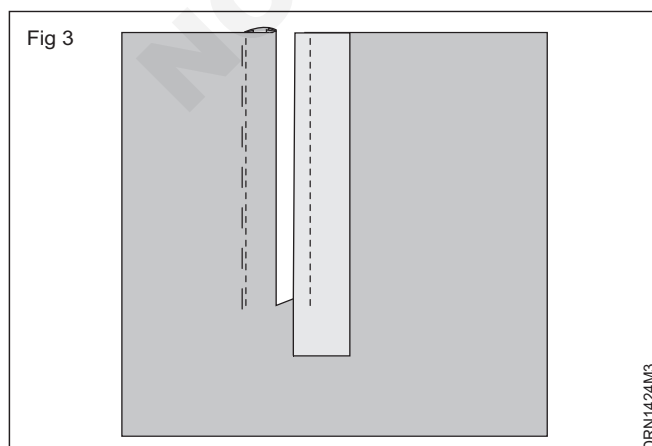
- 1 Take a piece of fabric 15 x 15 cm (sample piece). Take two pieces of fabric 12 x 4 cm for facing.
- 2 Draw a centre line on the sample piece, mark A and B. Take a point C at a distance of 1.5 cm from point A and draw a parallel line to the centre line 10 cm long. Mark point 'D'. (Fig 1)
- 3 Slash on the grain line 'C' to 'D' and clip diagonally to both sides on point D by 0.5 cm. (Fig 1)



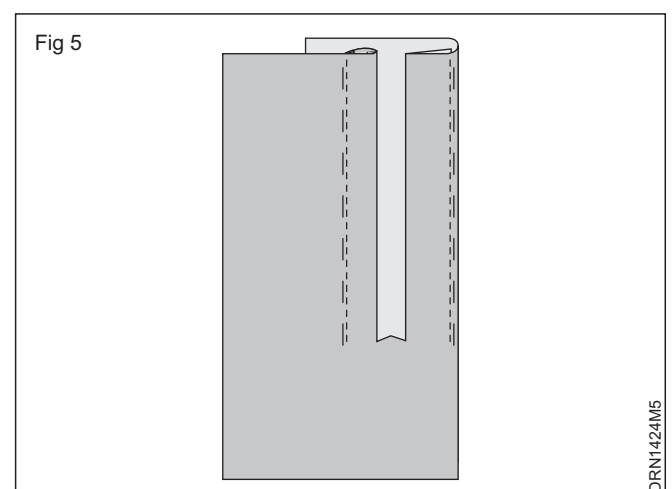
- 4 Set both the strips (12 x 4 cm) along with the slashed portion with right sides together and stitch up to clip and turn the edge of right facing by 1 cm. (Fig 2)



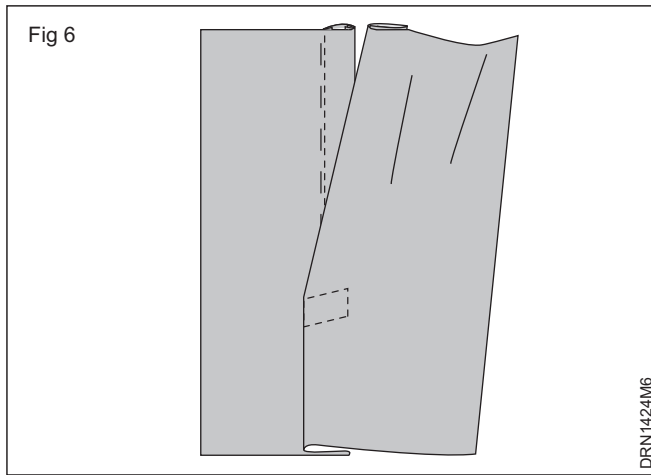
- 5 Turn the right facing on seam to wrong side of the fabric. Set the strip and stitch on the edge from right side of the fabric. (Fig 3)



- 7 Fold sample piece on left facing, leaving 3.5 cm and wrong sides of the fabric together. Baste through all the layers. (Fig 5)

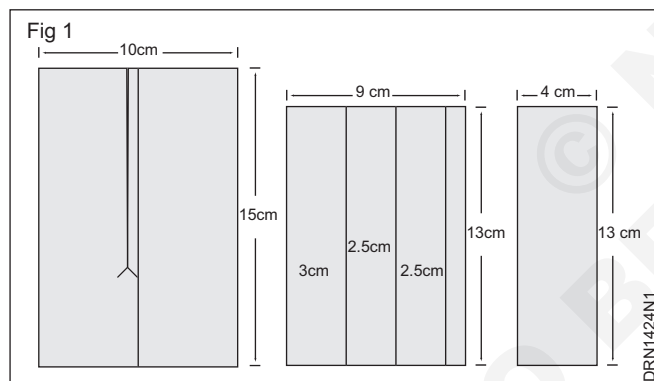


- 8 Turn the left placket side on the right placket side forming a pleat. Baste. Lock it at the end of the cut portion on the right side of the fabric. (Fig 6) Remove basting, trim the threads and press.

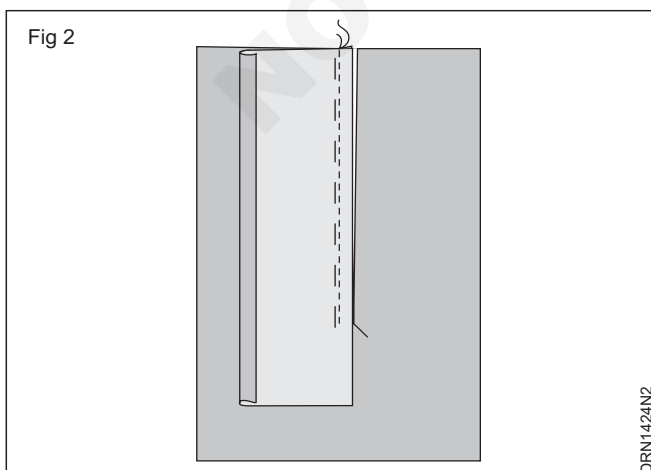


TASK 5: Construct a two-piece placket (upper garment)

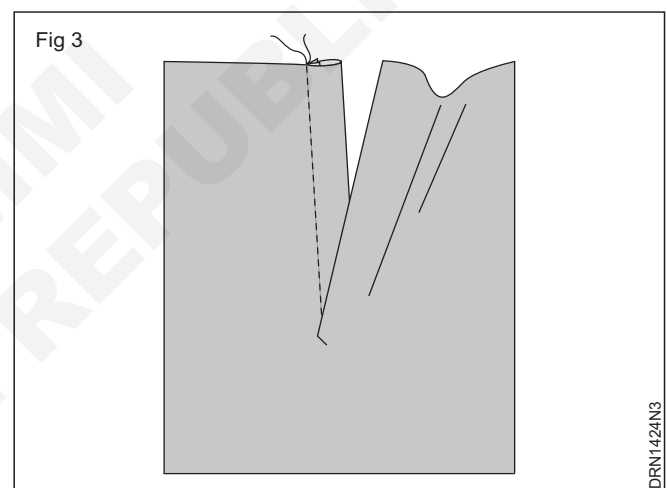
- 1 Mark and cut a piece of fabric 15 x 10 cm (sample piece). Cut 2 facings, one of 13 x 4 cm and the other of 13 x 9 cm.
- 2 Mark lines on the bigger facing 3 cm from the edge and two times 2.5 cm from the edge of each line. Mark the centre line on the sample piece. (Fig 1)
- 3 Mark parallel a 10 cm long line for placket opening, 0.5 cm away from the centre line towards left side. Slash the line and clip diagonally (0.5 cm) at the end. (Fig 1)



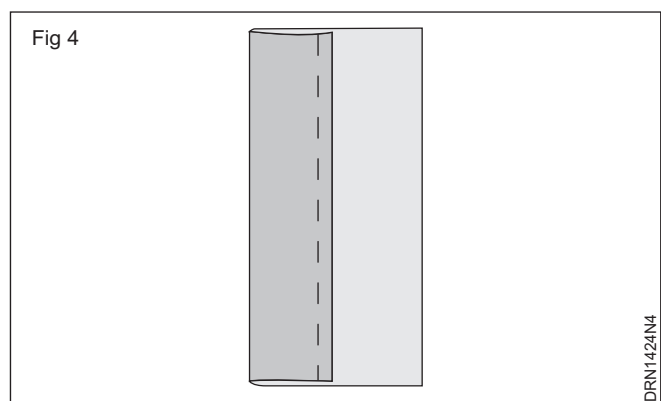
- 4 Turn sample piece to the right side. Place the smaller facing (13 x 4 cm) on the bigger side of the sample piece with right sides of the fabric together. Baste and stitch. Turn the other edge of the facing by 1 cm. (Fig 2)



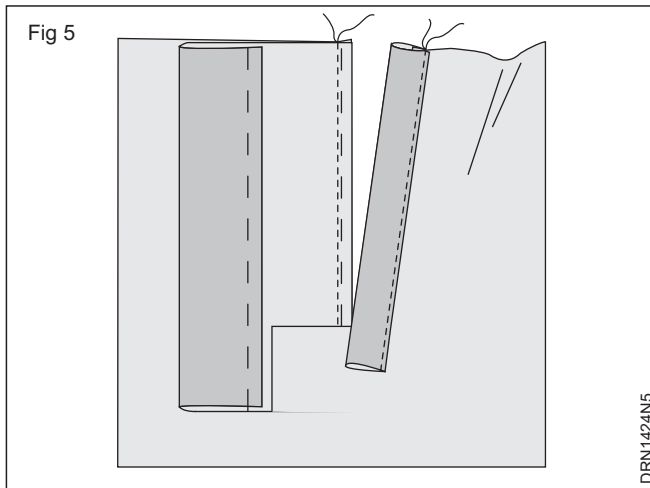
- 5 Clip facing at end of slash line on the previous clip.
- 6 Turn the facing towards wrong side of sample piece and fix the edge on the previous seam and stitch it in the crevice of the previous seam line from right side. Stop at clip and trim off 1.5 cm from bottom of facing. (Fig 3)



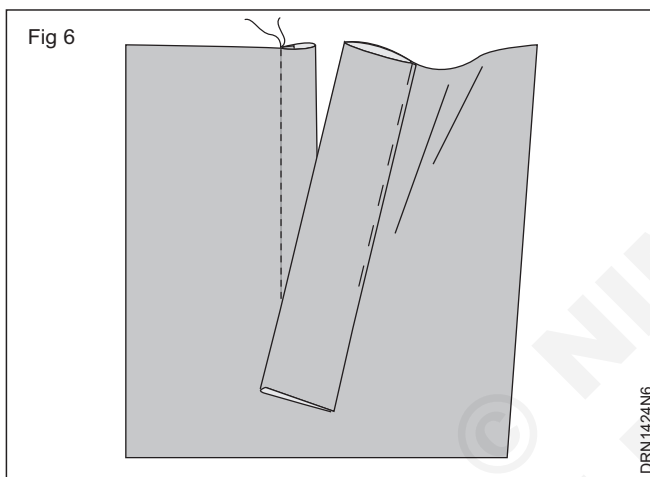
- 7 Take the bigger facing and fold and press 3 cm side towards wrong side of the fabric. Baste 0.5 cm away from the raw edge. (Fig 4)



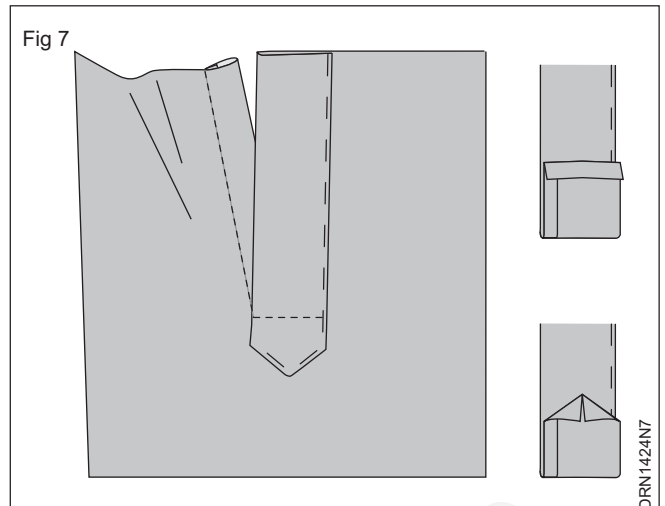
- 8 Place the right side of the facing on wrong side of the sample piece along the slash line and baste 0.5 cm away from the edge. Cut off a square of 3 x 3 cm from lower end of facing. Stitch along basting. (Fig 5)



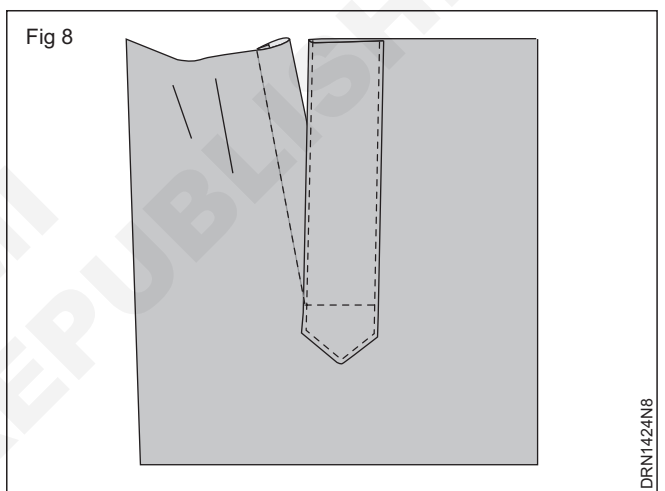
- 9 Bring the folded edge of facing to the right side of the fabric. Fold facing once more on the centre and set it covering previous seam. Keep seam allowance inside and baste, leaving 3 cm at lower edge. (Fig 6)



- 10 Fold the lower edge inside by 0.5 cm. Fold back the lower end of facing, forming a V-shape. (Fig 7)

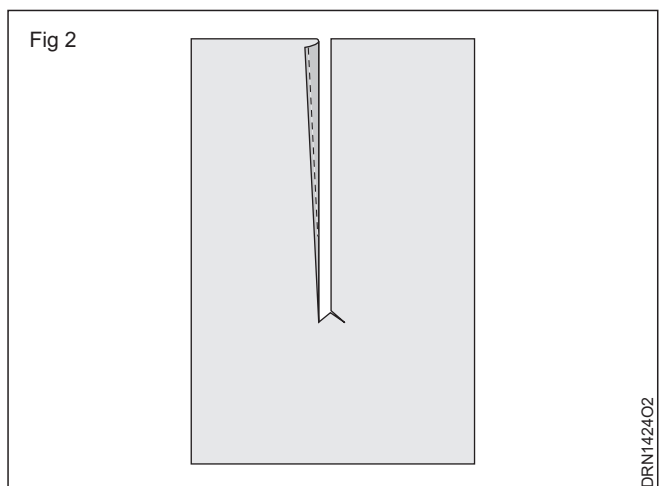
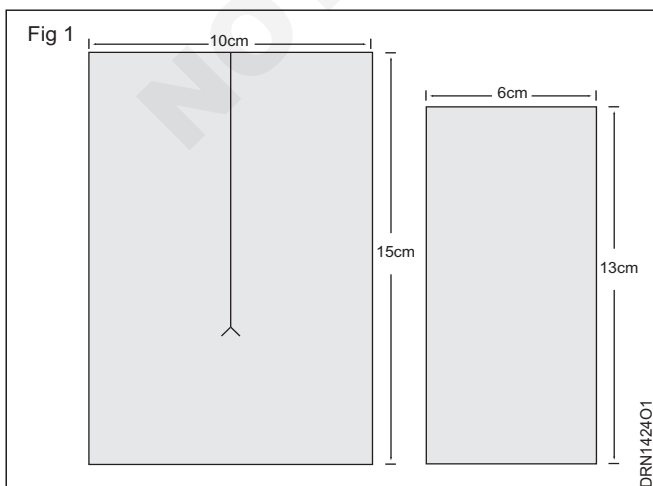


- 11 Fold back on fabric and top stitch all around leaving 1 mm from edges. Tack horizontally 3 mm above the slash end. (Fig 8)

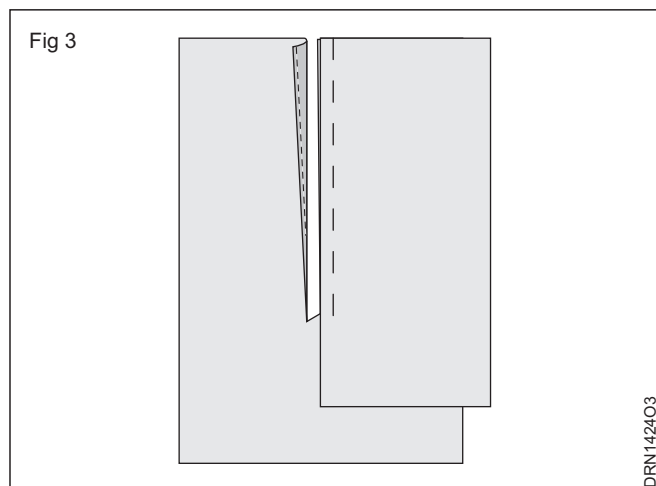


TASK 6: Construct a one-piece placket (sleeve)

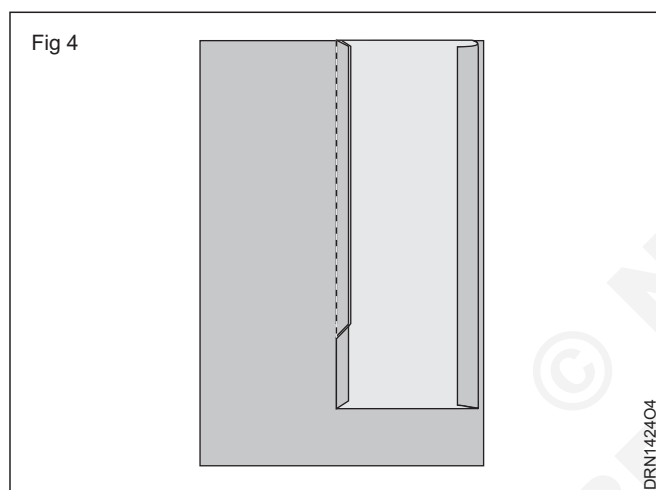
- 1 Take one piece of fabric 13 x 6 cm (facing) and another piece of 15 x 10 cm (sample). Mark 10 cm long line on centre of sample piece (placket opening) and slash. Clip 0.75 cm diagonally at the end. (Fig 1)
- 2 On the top edge turn 0.5 cm twice on the wrong side. Taper towards the clip side and machine stitch. (Fig 2)



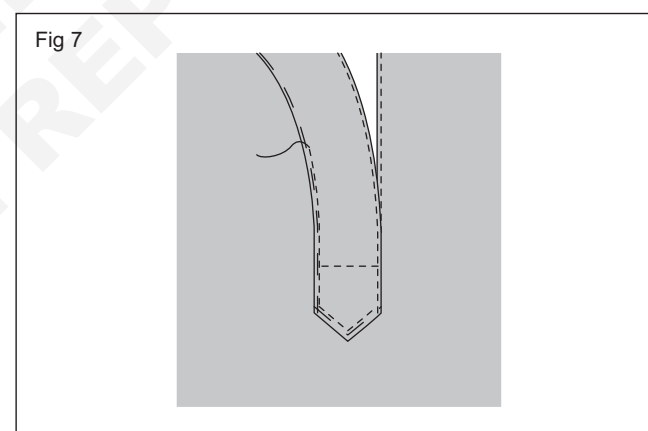
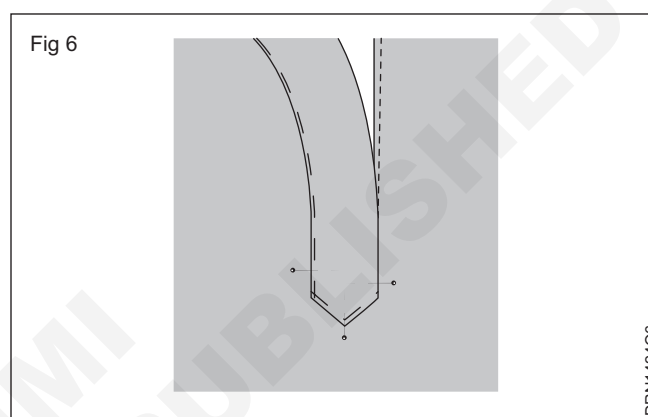
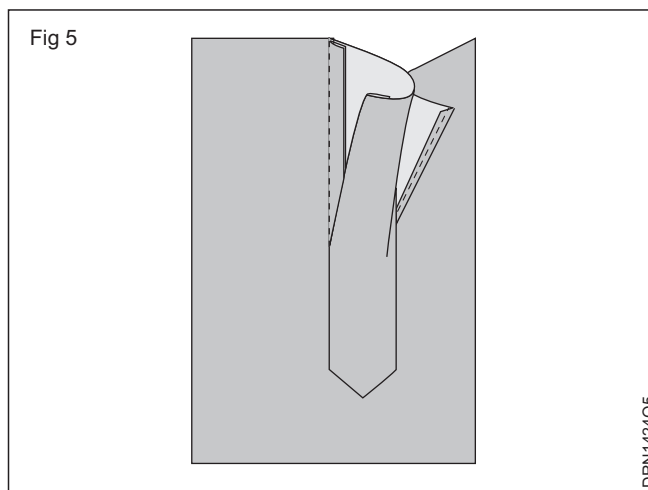
- 3 Baste facing along the unfinished edge of the placket opening, right side of facing with wrong side of the sample piece (0.5 cm seam allowance). (Fig 3)



- 4 Bring facing out on the right side of the sample piece and turn the raw edge of facing by 1 cm. (Fig 4)



- 5 From lower end of facing close to the stitching line cut off 3 cm in width and 1 cm in length to reduce bulk.
- 6 Roll over the facing on its previous seam, make a fold on the centre line and press. (Fig 5)
- 7 Turn the corners and form a peak at the centre of the placket end and press. Finish the placket end as in two-piece placket. (Figs 6 & 7)



Samples of zipper plackets

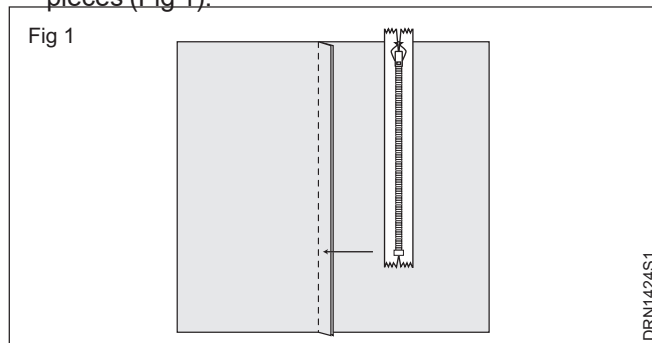
Objectives: At the end of this exercise you shall be able to

- construct centred application of zipper
- construct visible centred application of zipper
- construct a lapped zippered
- construct a open end zipper application.

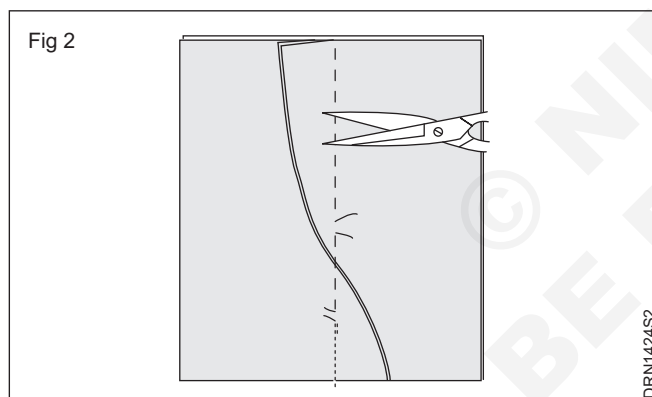
Material : 0.15 x 0.90m Long cloth / Poplin

TASK1: Centred application - Invisible

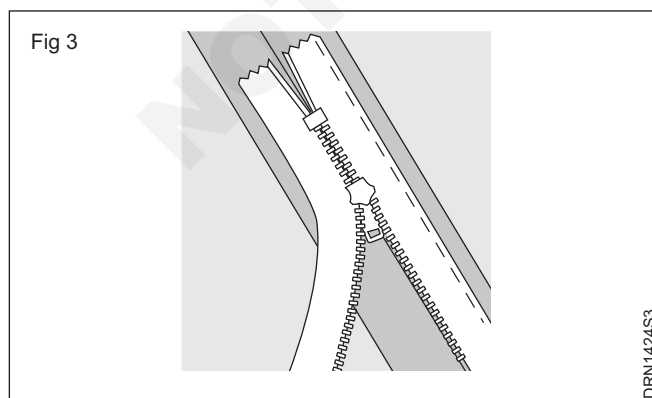
- 1 Work with motorized sewing machine. Attach zipper foot. Take 10cm long zipper and pieces of fabric (15x10cm); cover 1 piece by the other with right sides together. Form a plain seam on the longer side; give 2 cm seam allowance. Follow these instructions. Lock seam in the beginning, use longer machine stitches (i.e. 3 stitches/cm) up to the end of the placket, i.e. 10cm from top. Stitch back at the end. Reduce the stitch length to normal and stitch to the rest of the length of the fabric. Lock in the end and unfold the pieces (Fig 1).



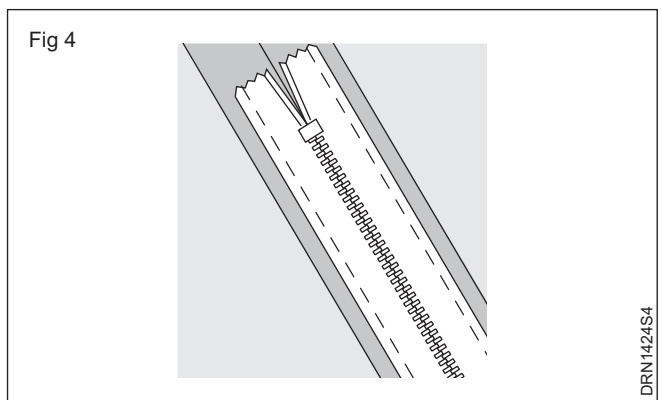
- 2 Clip long machine stitches at an interval of 3 cm, as this seam has to be removed after fixing the zipper. (Fig 2) Press open seam allowance.



- 3 Open the zipper and place the right side of zipper on the wrong side of the fabric. Keep the chain edge along the seam line from top edge of the fabric up the placket opening mark. Baste the zipper tape with one seam allowance. (Fig 3)

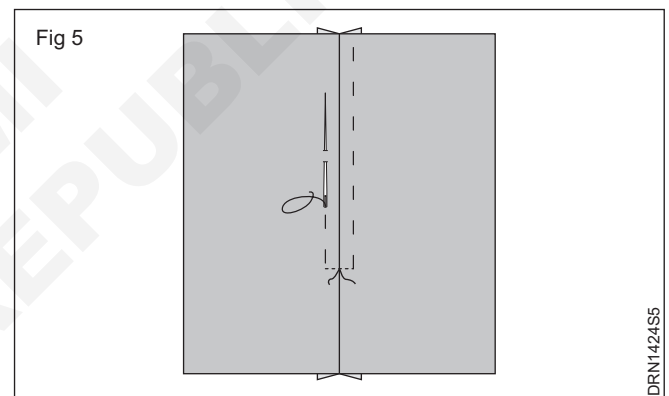


- 4 Close the zipper. Baste the other side of the zipper tape with other seam allowance. (Fig 4)

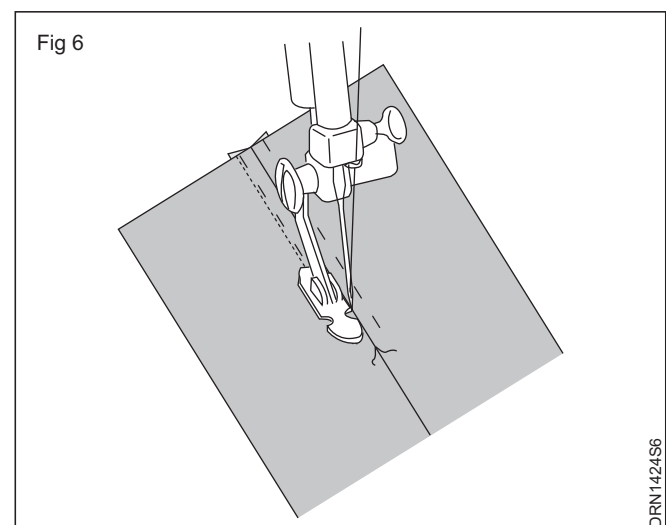


Lock of zipper end should be kept towards the end of the placket opening).

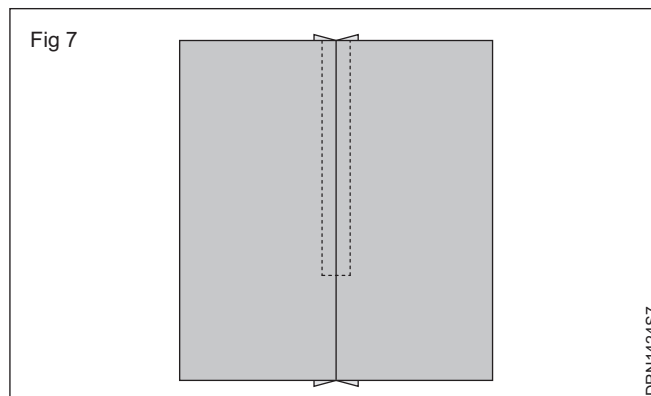
- 5 Turn the fabric with right side up and spread the fabric as flat as possible. Now baste from right side through all layers of the fabric 6 mm away from seam line. Start basting from the seam line at the bottom end of the opening. (Fig 5)



- 6 Start machine stitching from the right side along the basting from top end of the fabric using a zipper foot. Stop in the end of opening just below the lock of the zipper. Make pivot and cross to other side and stitch upto the top end of fabric. (Fig 6)

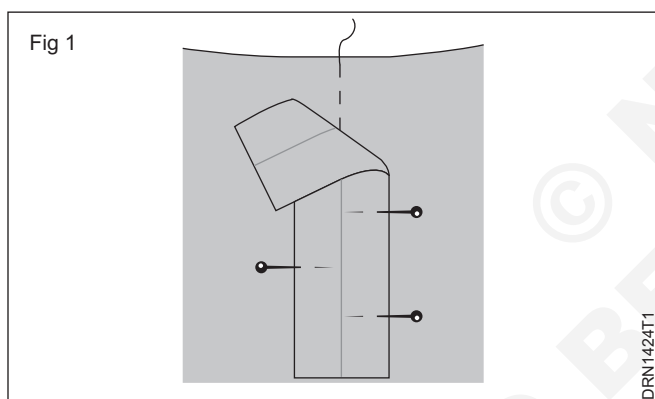


- 7 Remove basting and clipped centre seam threads. (Fig 7)

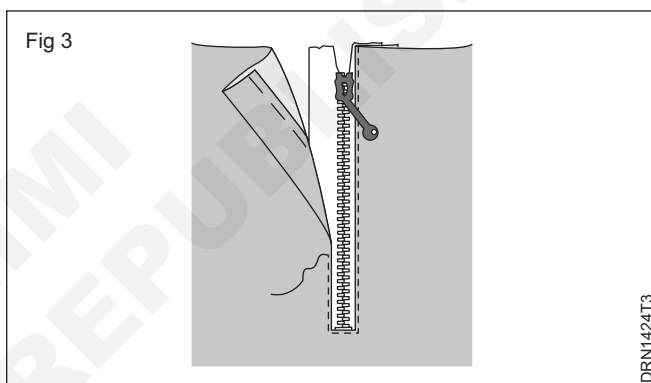
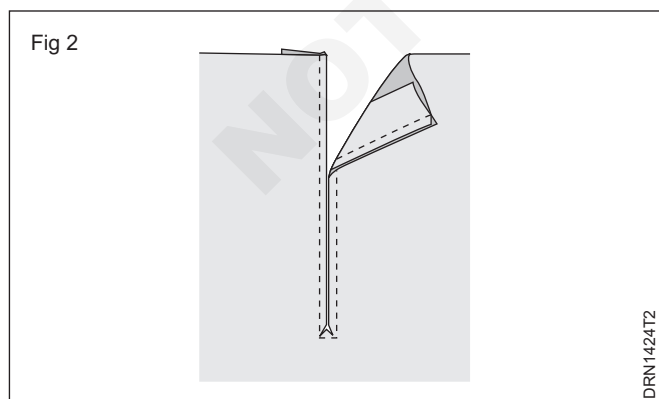


TASK2: Zipper Centred Application - Visible

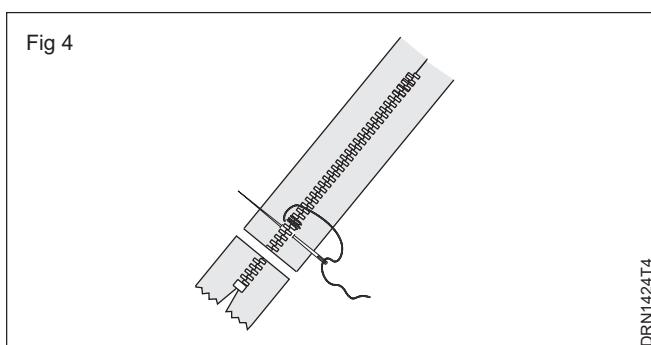
- 1 **Zipper placket** (visible): Take one piece of the sample cloth of 15 x 20 cm and take a zipper of 10 cm length. Mark 10 cm for slash on the centre line from right side of the cloth. Cut a strip of 13 x 5 cm (length of strip should be app. 3 cm more than the zipper length).
- 2 Fold and press strip on the centre. Match the centre line of strip with sample piece with the right sides together. Baste on the slash mark through both the layers and all around the strip edges. (Fig 1)
- 4 Turn the strip pieces towards wrong side of the sample piece. Press and fix with basting. Set the zipper on slash line. Baste zipper below the slash edges and stitch all around. (Fig 3)



- 3 Stitch from left side round the slash mark at a distance of teeth width plus 2 mm. Slash on slash mark, stop 1 cm before the end and clip to the corners. Remove basting. (Fig 2)

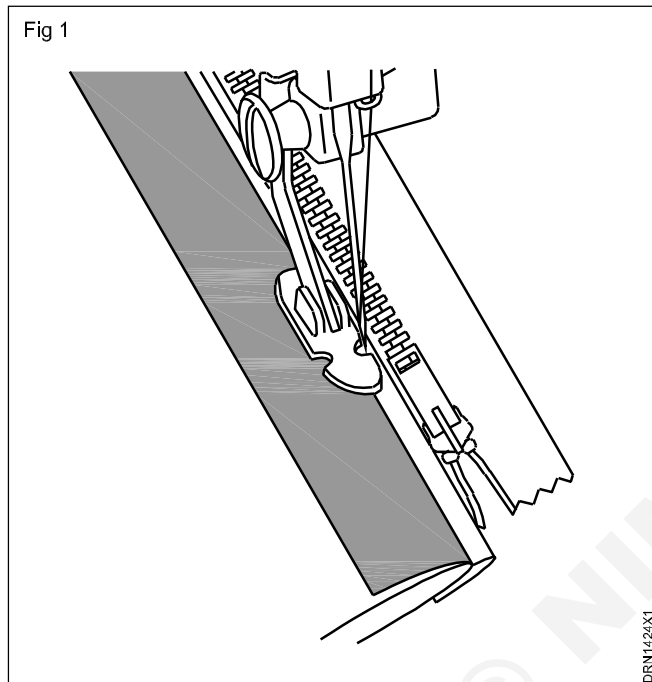


- 5 **How to adjust the zipper length?** Zips are available in 5 different length, but they will not always match the required slit length of the placket. In that case you have to use a zipper longer than the placket length and to shorten it.
- 6 Shorten zipper at the lower end. Tack at the required length and trim zipper 1.5cm below tacking. (Fig 4)



TASK 3: Lapped Zipper

- 1 Take two pieces of (15x10cm) fabric. Follow the instructions in Task1 till fig 3. Now, position Zipper foot to the left of the needle. Turn the Zipper foot to the left of the needle. Turn the Zipper face up, forming a fold in the seam allowance. Bring the fold close to the Zipper ladder or chain but not over it. Stitch along the edge of the fold with the seam allowance. Bring the fold close to the Zipper ladder or chain but not over it. Stitch along the edge of the fold with the seam allowance the left side sample piece. (Fig 1)



- 2 Turn the fabric with right side up and spread it as flat as possible. Now baste across bottom of zipper, then up along the side. through all layers of fabric 6mm away from seam line. (Fig 2)
- 3 Position zipper foot at the right side and top stitch close to the basting. Remove basting (Fig 3)

Fig 2

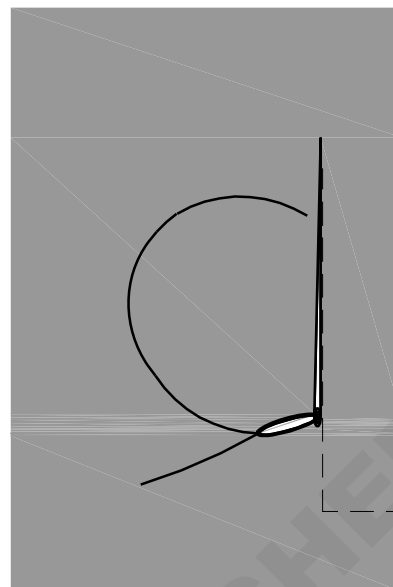
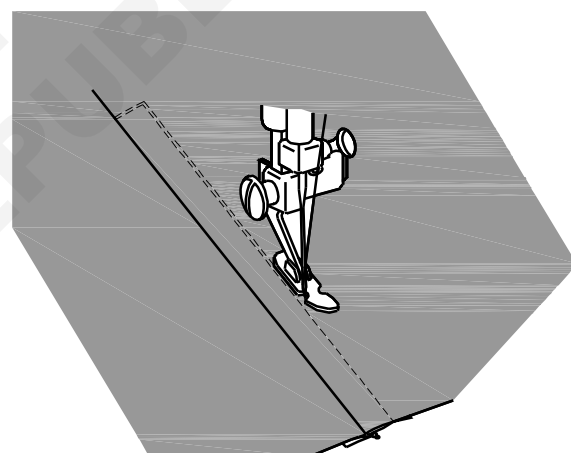


Fig 3



TASK 4: Open end Zipper

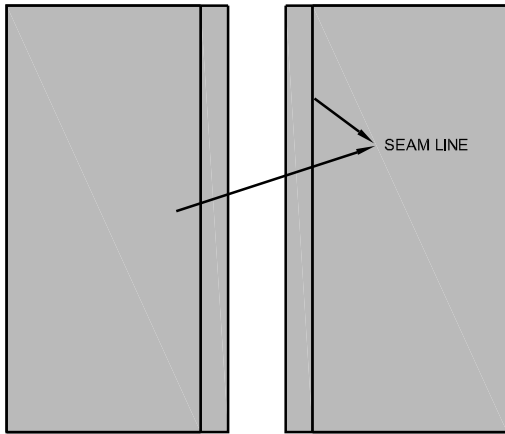
Use a open ender Zipper

- 1 Take two pieces of fabric (15x15cm). Mark the seam allowance of placket opening (2cm) at the wrong side of both the fabric. piece. (Fig 1)
- 2 Machine tack the placket seam closed. Press open the seam allowances. With the zipper teeth centred over the seam and bottom stop at the bottom of opening position the closed zipper and pin it. Baste the right hand tape to seam allowances from bottom to top (Fig 2)
- 3 Turn the Zipper face up, forming a fold in the seam allowance. Fold close to the Zipper teeth, but care must be taken not it take it over the zipper teeth. Position the

foot to the left of the needle and stitch along edge of fold through all thickness of fabric (Fig 3)

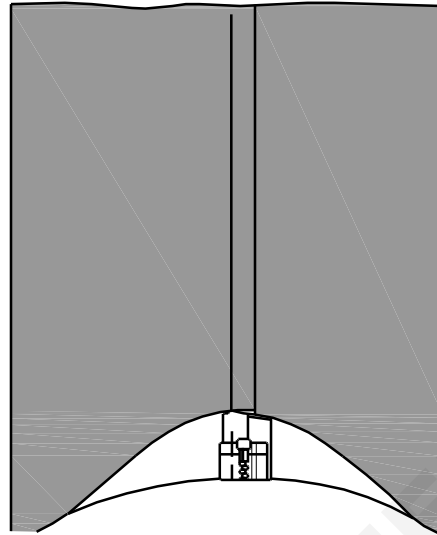
- 4 Turn the fabric with right side up and spread the fabric as flat as possible. Now baste from right side through all layers of fabric from right side through all layers of fabric 6mm away from seamline. Baste from the seamline at the bottom end of the opening. (Fig 4)
- 5 Position zipper foot to the right of the needle. Top stitch close to basting. Similarly top stitch the other side zipper position the foot at the left of the needle (Stitch at the required distance from seamline). Finally, remove the basting to open the zipper and apply facing. (Fig 5)

Fig 1



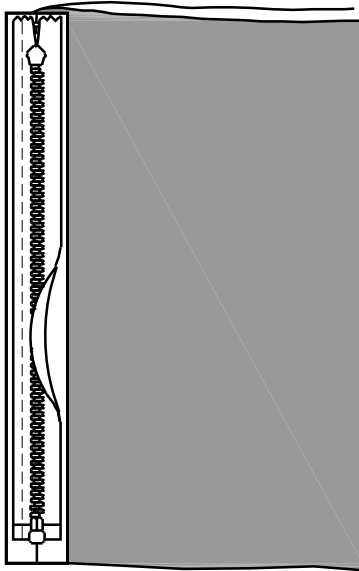
DRN1424Y1

Fig 4



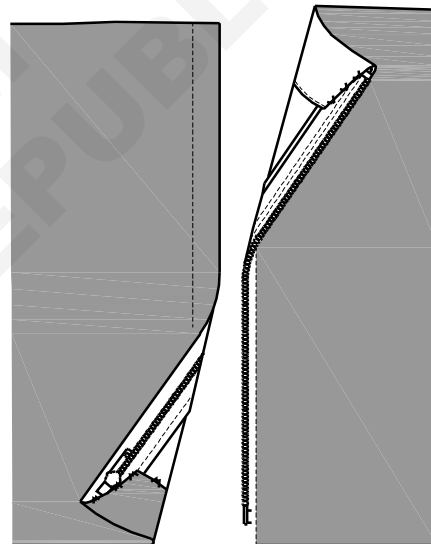
DRN1424Y4

Fig 2



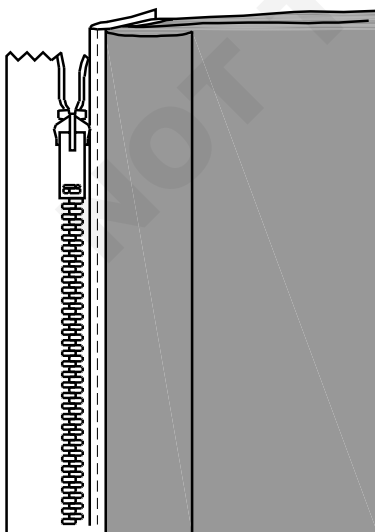
DRN1424Y2

Fig 5



DRN1424Y5

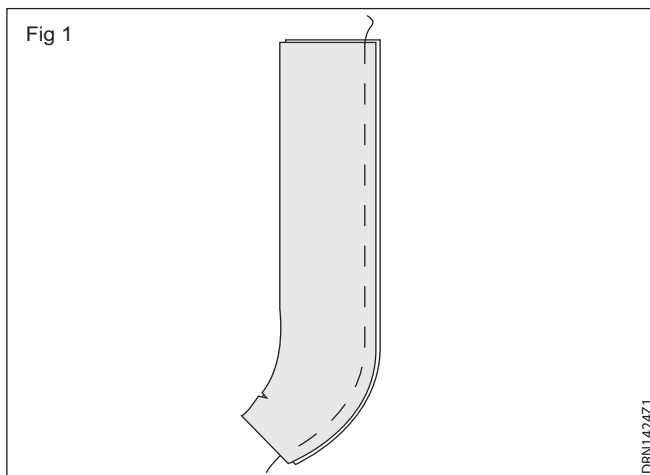
Fig 3



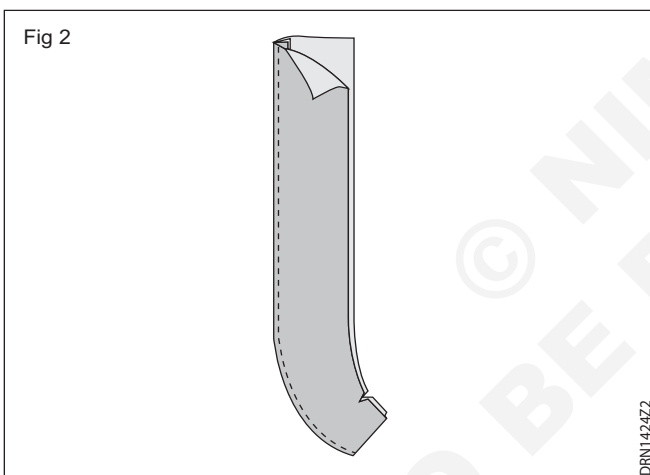
DRN1424Y3

TASK 5: Prepare the zip fly in front part of a trouser cut fabric

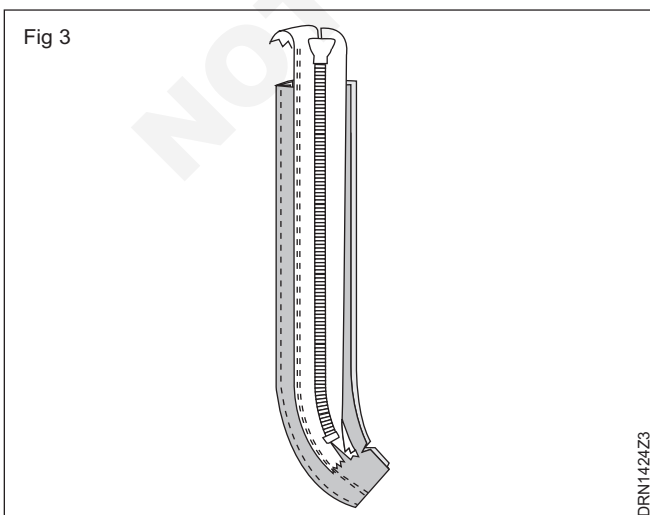
- 1 Take two fly pieces (left fly is facing, right fly is shield) and their linings. Clip the seam allowance on point 11 in front and fly (see instructions for drafting). Take left fly (=facing part) and lining. Stitch on outer round shape, right sides together. (Fig 1)



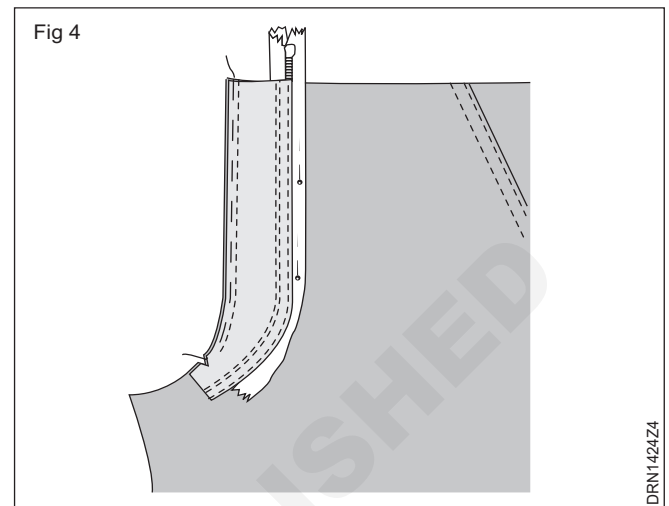
- 2 Turn right side out and stitch on the edge of previous seam. (Fig 2)



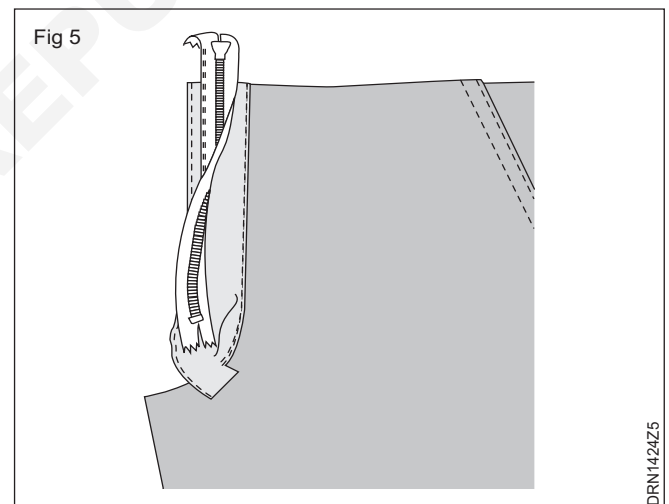
- 3 Place closed zip on the fly piece wrong side of zip up; leave 0.5 cm from the raw edge and 1 cm above the clip. Baste 6 mm away from the teeth of zip. Stitch with double seam. (Fig 3)



- 4 Baste raw edge of facing and lining with left front of short. Match clip of facing and fly line. Be careful that the edge of zip is not caught by stitches. (Fold zipper back and if necessary pin it to hold it out of the way). Stitch along the basting line from clip to waist edge. (Fig 4)

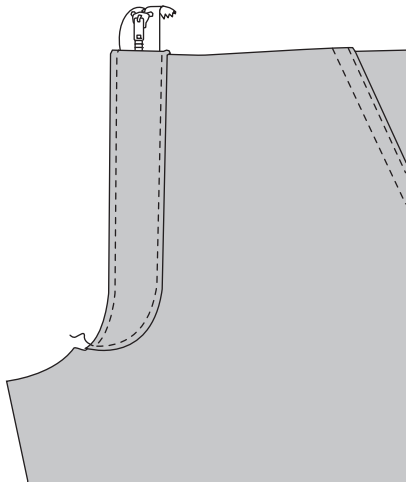


- 5 Turn facing on seam line away from the front piece. From right side stitch through the facing and all seam allowances close to the edge of facing up to clip and lock the stitch. (Fig 5)



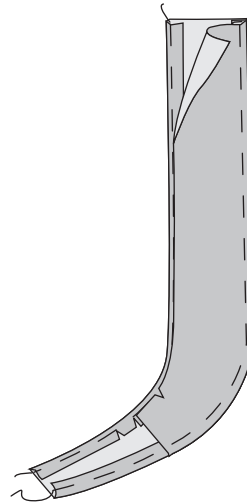
- 6 Fold the facing towards wrong side on the seam line. Baste close to the fold to hold facing in position. From the right side baste a guide line 3 cm away from the fold, maintaining the shape of fly. Stitch close to the basting line. (Fig 6)
- 7 Stitch the right fly (shield): Take right sides of fly and lining together. Baste and stitch on outer shape. Cut notches on the round shape. (Fig 7)
- 8 Turn right side out. Press and set the outer edge and baste on it up to end. Turn also the edge of the balance part of lining. Cut notches on the inner curved shape of lining (Fig 8).
- 9 Fold the edge of lining by 1.5 cm to wrong side. Align edge of lining and shield. Baste and press on the lining. (Fig 9)

Fig 6



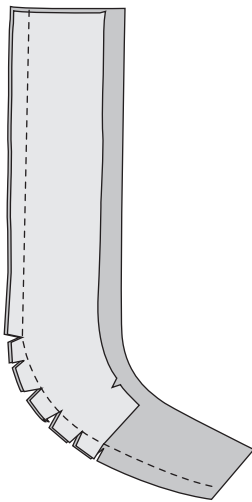
DRN1424Z6

Fig 9



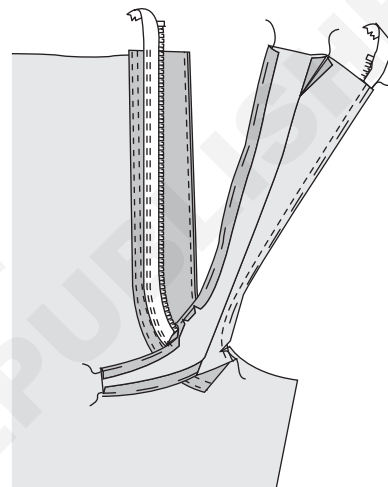
DRN1424Z9

Fig 7



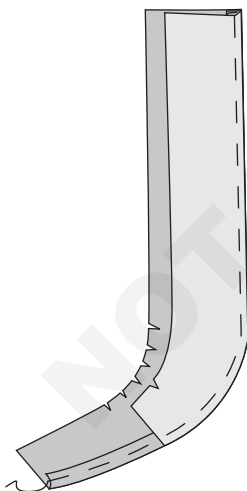
DRN1424Z7

Fig 10



DRN1424ZA

Fig 8

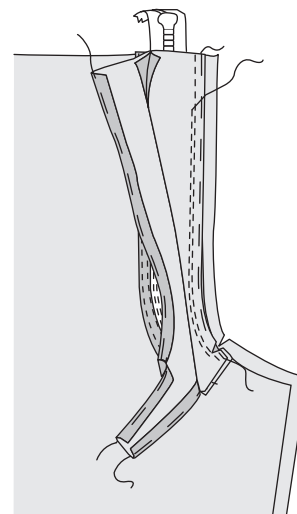


DRN1424Z8

10 Open the zip. Baste the unattached zip part to the fly shield, wrong side of zip on right side of fly shield. Stitch along the basting but don't stitch the shield lining. Be careful: the position of the zip should be same as in left side facing. (Fig 10)

11 Close the zip. Place right front piece under left front piece with right sides together. Edge of fly line of right front has to extend the fly line of left front by 1 cm. Baste zip and shield on the right front short piece along the fly line. Stitch over the previous seam line up to the clip. Turn away lining piece. (Fig 11)

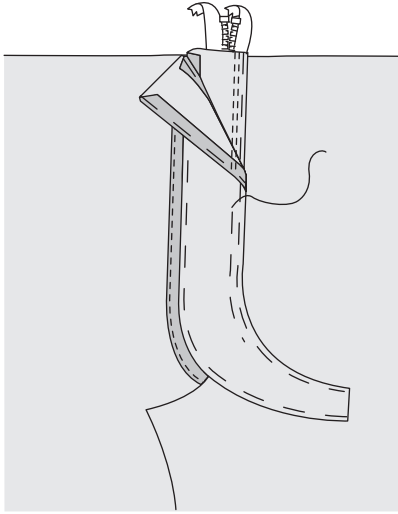
Fig 11



DRN1424ZB

- 12 Place short flat on table with wrong side upwards. Turn the seam allowance to shield and right front piece towards right front portion. Cover the shield and seam allowance with lining. Baste it. Be careful that the lining is flat on shield, so that no folds and wrinkles come in it. (Fig 12)

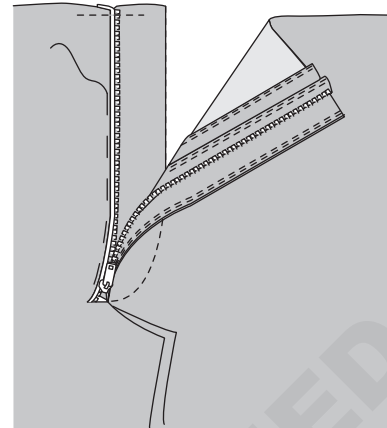
Fig 12



DRN1424ZC

- 13 Turn the garment to the right side. Stitch close to the left fly seam through all layers. Tack zip flat on waistline on both sides 0.5 cm below the waist-line. Trim the edges at the top. (Fig 13)

Fig 13



DRN1424ZD

Make samples of pockets

Objectives: At the end of this exercise you shall be able to

- prepare a patch pocket
- prepare and fix flap on patch pocket
- prepare an inseam pocket for trousers
- prepare a slant pocket
- prepare an inseam pocket for kurta
- prepare a hip pocket with welt and flap.

Requirements

Tools / Equipments

- Single needle lock stitch machine - 1 No.
- Iron box - 1 No.
- Hand needle - 1 No.
- Scissors - 1 No.
- Dress maker's pin - 1 Box

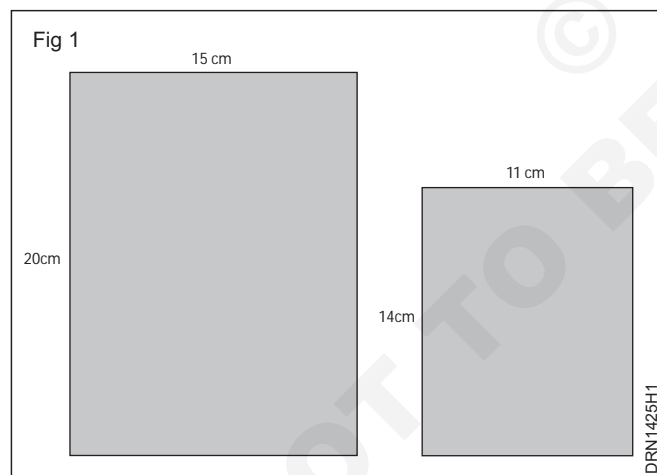
Materials

- Poplin - 0.35 x 0.90 m
- Casement - 0.25 x 0.90 m
- Lining (Long cloth) - 0.35 x 0.90 m
- Sewing thread - 1 No.

PROCEDURE

TASK 1: Prepare a patch pocket

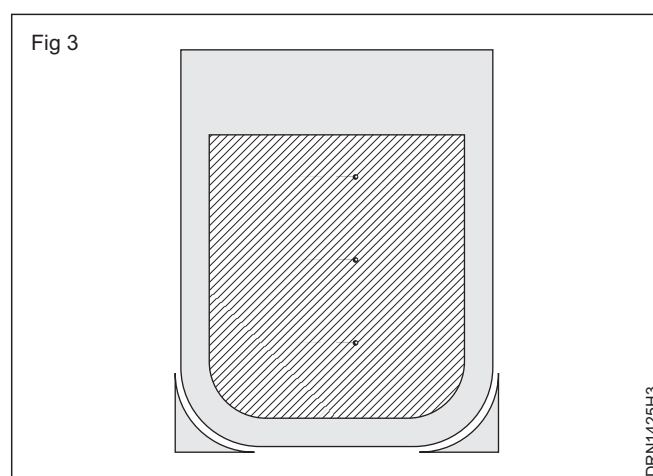
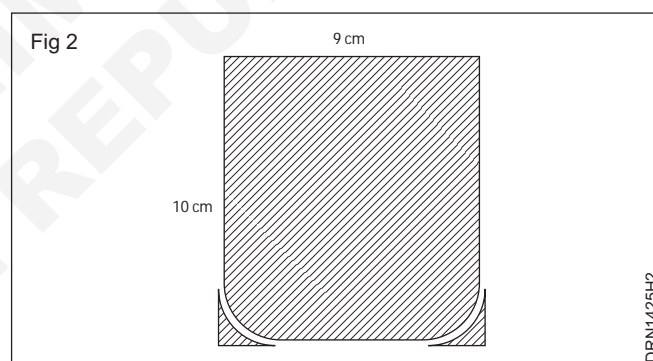
- 1 Cut one piece of Poplin (20 cm x 15 cm) and another piece of cloth (14 x 11 cm) for pocket. This includes seam allowances and facing on upper side of pocket. (Fig 1)



- 2 Prepare a paper pattern (template) on hard paper of 10 cm x 9 cm (exact size of pocket without seam allowances and facing). Shape the lower corners round. (Fig 2)

Take care that both rounds are equal.

- 3 Pin the paper pattern on wrong side of the cloth (14 x 11 cm). Keep 3 cm facing on the top and 1 cm at all other three sides. Mark with chalk or pencil. Transfer the mark with tracing wheel on right side of cloth. Trim off the corners (Fig 3).



- 4 Turn the edge of facing by 1 cm on the wrong side of cloth and machine stitch 0.5 cm away from the folded edge. Then turn the facing from folding line on the right side and machine stitch on the side turning mark of both sides of facing. (Fig 4)

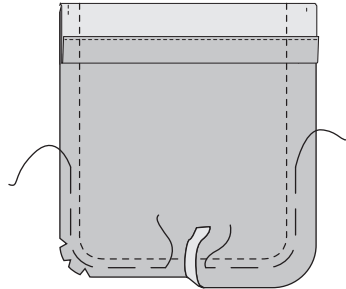
Fig 4



DRN1425H4

- 5 Mark running stitch 2 mm outside the turning mark of three sides. Notch on the rounds to reduce bulk (Fig 5).

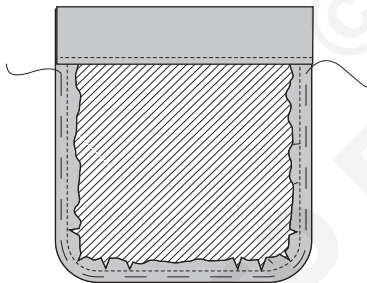
Fig 5



DRN1425H5

- 6 Turn the facing on the wrong side. Pull corners out neatly. Put the paper pattern (template) inside the facing touching the folding line on top. This shall help to shape the pocket. Hold one thread end of running stitch and pull the other end tamping seam allowance over the paper pattern until the seam allowance rolls over it. Press gently on the edges. (Fig 6)

Fig 6

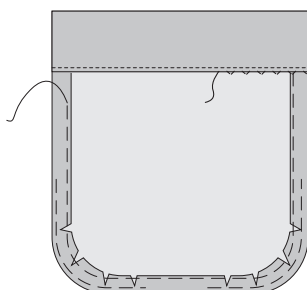


DRN1425H6

- 7 Notch on curves and remove thread of running stitch and remove the paper pattern.

Take care that the turned edges are not disturbed. Finish the facing turning on pocket mouth by slip stitch. (Fig 7)

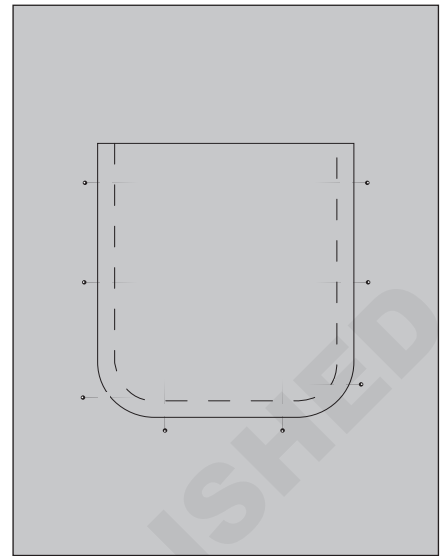
Fig 7



DRN1425H7

- 8 To fix the pocket on the desired position take the piece of cloth (20 x 15 cm). Place the pocket in the centre of it and pin. Keeping right side of cloth up, baste along the sides 2 mm away from the edge, but don't baste on pocket mouth. (Fig 8)

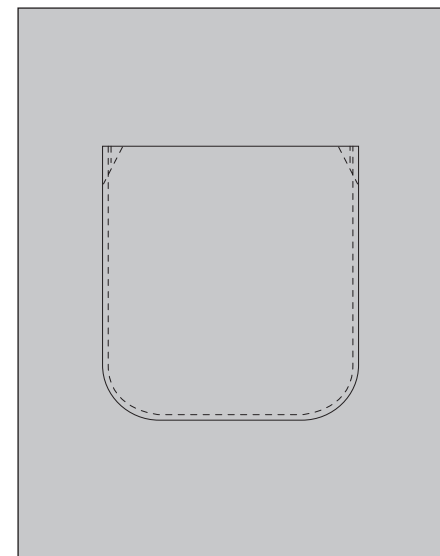
Fig 8



DRN1425H8

- 9 Remove pins. Start machine stitching from side top end of pocket. Tack the corners while forming a triangle. Continue up to the other end and tack the corner in the same manner. Remove basting and press. (Fig 9)

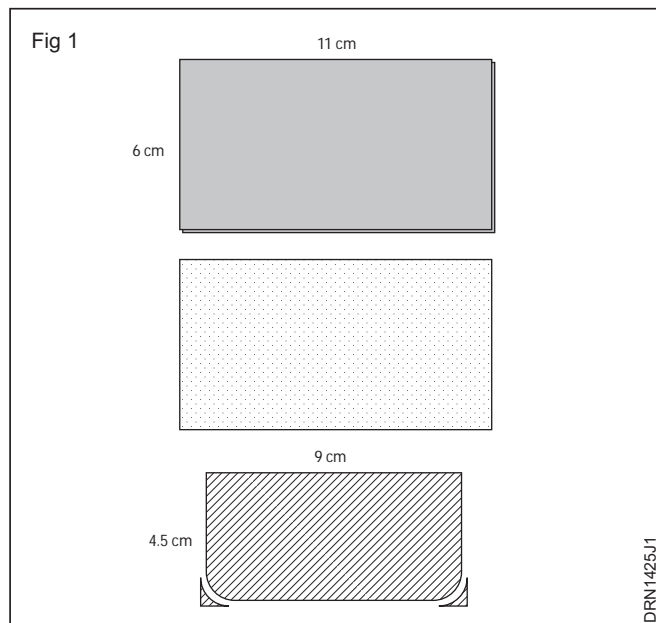
Fig 9



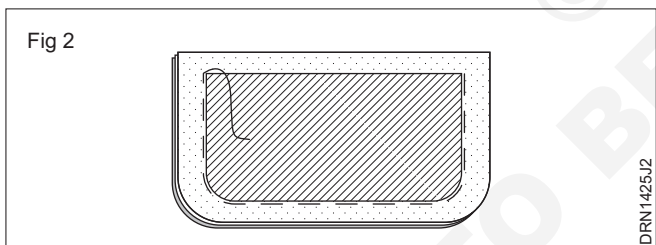
DRN1425H9

TASK 2: Prepare and fix flap on patch pocket

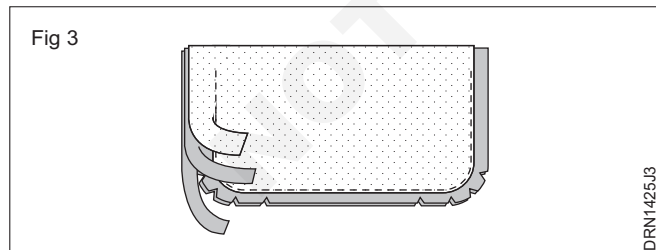
- 1 Cut 2 pieces of cloth (poplin) and 1 piece of interlining cloth (11 cm X 6 cm). Prepare a paper pattern for flap (9 cm X 4.5 cm) without any seam allowance. Shape the corners of one side, (round shape of both sides must be equal). (Fig 1)



- 2 Match with right side together the original cloth pieces. Place the facing piece over it. Lay the flap paper pattern on the facing piece leaving seam allowance and pin all around. Mark with chalk or pencil along the edge of the paper pattern. Baste slightly away from the mark. Remove pins and paper pattern. Stitch on the mark. Remove basting. (Fig 2)

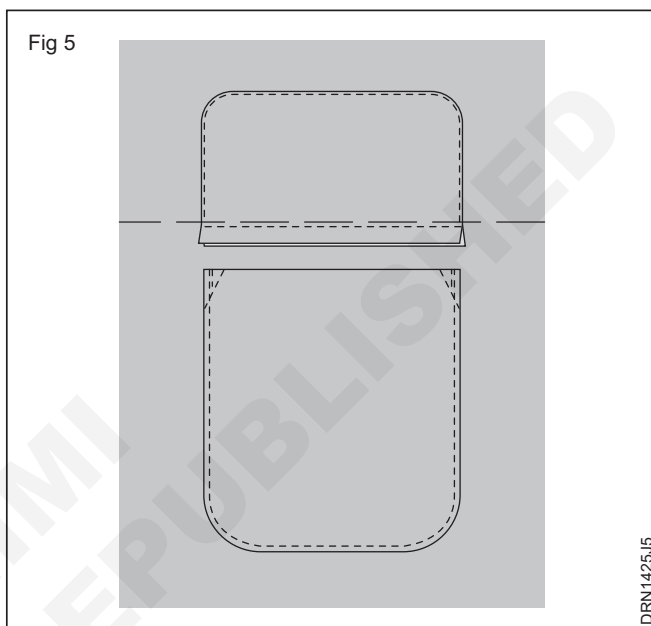
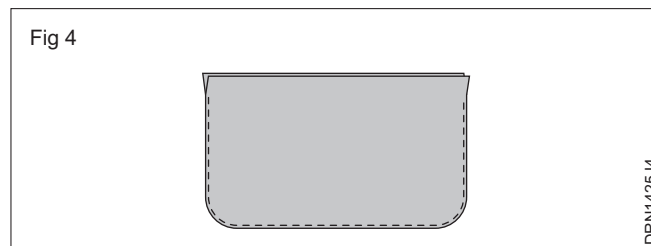


- 3 Trim the seam allowance and notch the curves. Trim facing completely to seam line. (Fig 3)

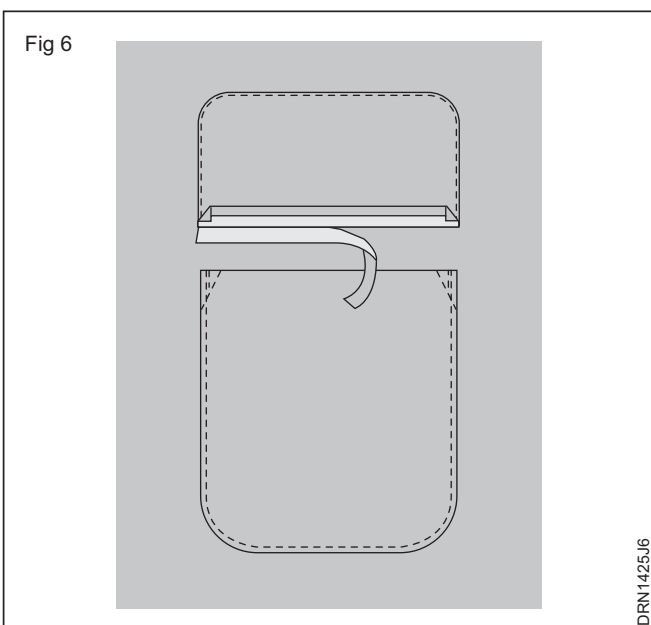


- 4 Turn the right side of flap out and set the seam by pushing the seam edge inside by 1 mm, so that the seam is not visible from right side. Stitch with machine from right side at 1 mm distance from edge. Start at a distance of 0.5 cm from the flap. (Fig 4)
- 5 Attach the pocket flap above the prepared patch pocket (SS.No.1). Mark flap seam line at 1 cm distance on the top of pocket. Pin flap to the patch piece with right sides

together raw edge of flap 0.5 cm away from pocket mouth. Baste first, then stitch on flap seam line. (Fig 5)

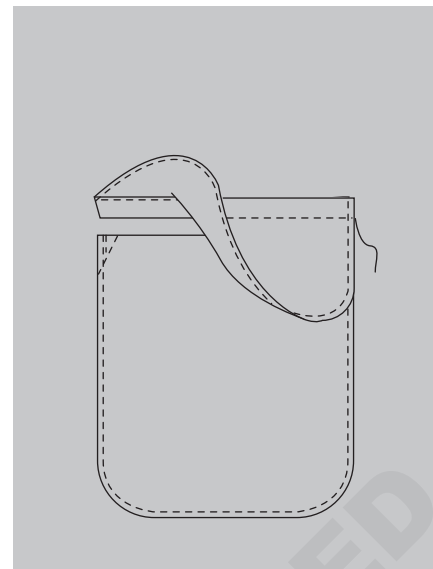


- 6 Remove basting and press open the seam. Trim off carefully the lower seam allowance of facing and original cloth close to stitching. (Fig 6)



- Turn down the flap over the pocket and press. Machine stitch at a distance of 5 mm from the turned edge of flap. Tack firmly both ends of seams. Press both pocket and flap. (Fig 7)

Fig 7

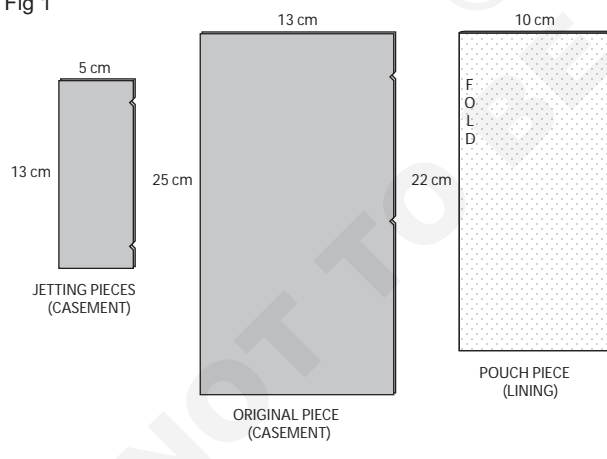


DRN1425J7

TASK 3: Prepare an in-seam pocket (trousers)

- Take two pieces of casement (25 x 13 cm). Mark points at a distance of 3 cm and 13 cm from top edge on longer side. Cut notches on both the marks.
- Cut one piece of pocket pouch cloth (22 x 20 cm). Fold the fabric lengthwise.
- Cut two pieces of casement cloth (13 x 5 cm) for pocket stay jetting.
- Cut notches on one longer side of jetting piece leaving 1.5 cm from upper and lower edge. (Fig 1)

Fig 1



DRN1425K1

Depth of all notches should be of 1 cm.

Shape pocket pouch

0-1 = 22 cm pouch length

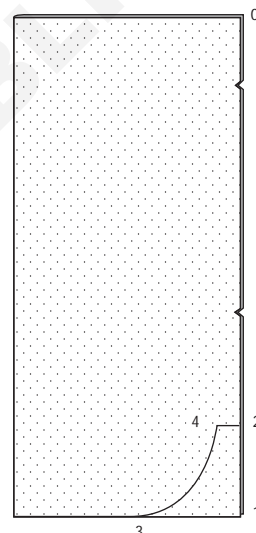
1-2 = 1-3 = 5 cm

2-4 = 1.5 cm

Cut on the marked lines. (Fig 3) } Join 2-4
Shape round 3-4

- Cut on the marked lines Cut notches from top (i.e. point 0) and 5 cm from lower corner (i.e. point 2) (Fig 2).

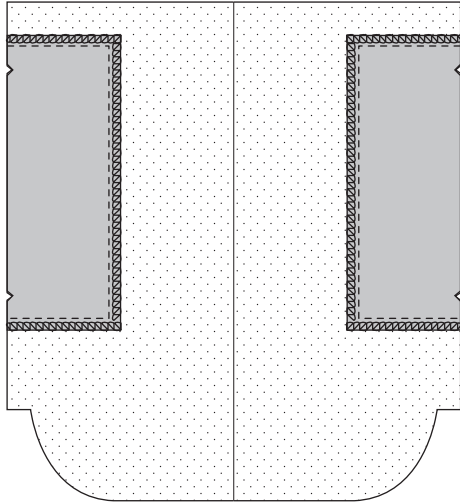
Fig 2



DRN1425K2

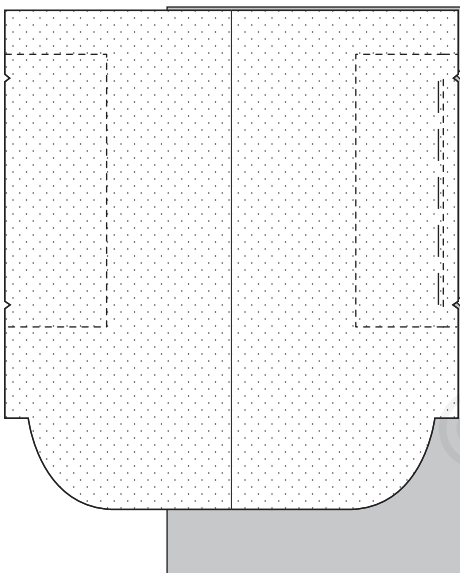
- Overlock on the edges except the notched edge.
- Fix stay pieces on the wrong side of the pouch piece, matching notches and raw edges on either sides. Machine stitch along the overlock. (Fig 3)
- With wrong side of pouch piece and right side of casement (original piece) together match notches and edges. Baste together between notches (pocket opening) slightly away from notch depth and stitch with machine, leaving seam allowance of 8 mm from the edge. (Lock both ends of seam by knotting thread ends.) (Fig 4)
- Turn the pocket pouch on the wrong side of the original cloth. Seam pushing the edge by 2 mm inside and press. Make top stitch on the right side between the notches 8 mm away from the edge. Finish both sides. (Fig 5)

Fig 3



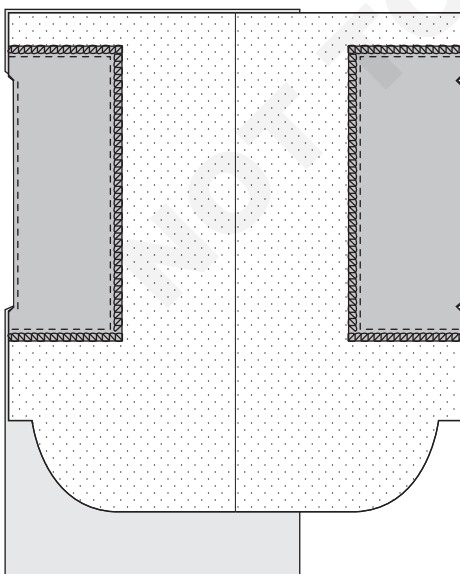
DRN1425K3

Fig 4



DRN1425K4

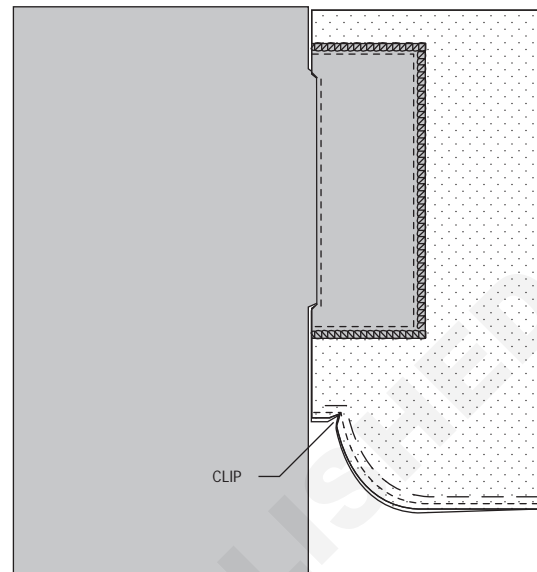
Fig 5



DRN1425K5

- 10 Fold the pocket pouch lengthwise bringing out wrong side. Match lower round edges, baste and stitch with machine 0.75 cm away from the edge making pivot at the upper end of round shape. Clip the corner and remove basting (Fig 6).

Fig 6

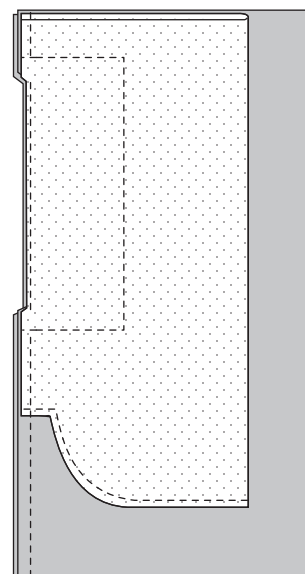


DRN1425K6

- 11 Turn the pocket pouch, right side out. Set the seam in centre. Make top stitch 0.75 cm away from the edge. Place both original pieces one over the other with right sides together, match the notches and raw edges from top to bottom.
- 12 Tack the loose raw edge of the pocket pouch close to the pocket mouth along with the raw edges of original cloth and baste. Stitch by machine leaving 1 cm seam allowance from top to bottom.

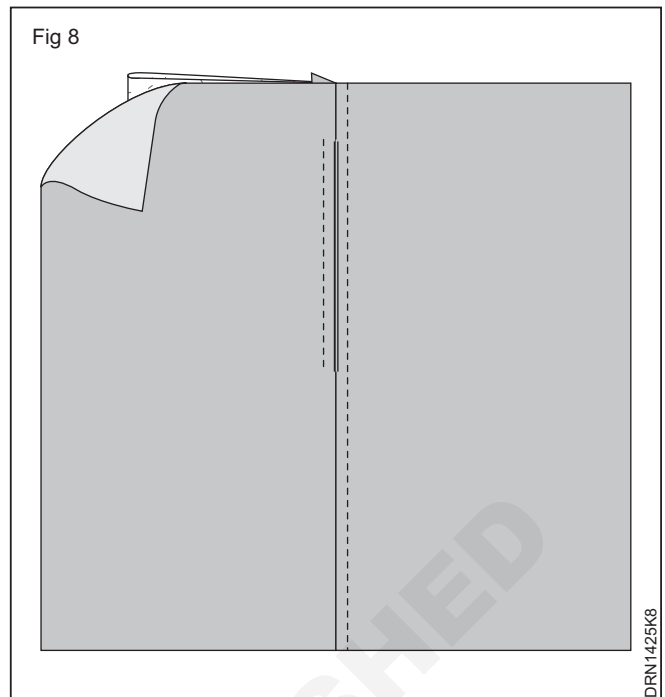
(Take care that the pocket is not caught by the seam (Fig 7))

Fig 7



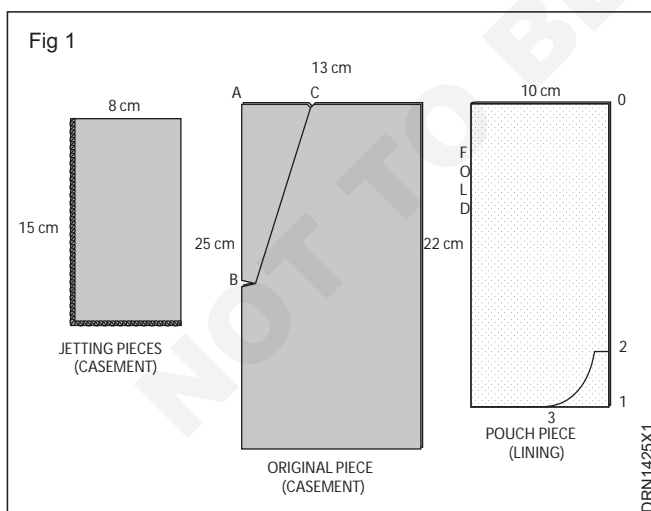
DRN1425K7

- 13 Bring out the right sides of original cloth. Press the seam allowance away from pocket mouth. Make top seam on the seam allowance side, 2 mm away from the previous seam line. (Fig 8)

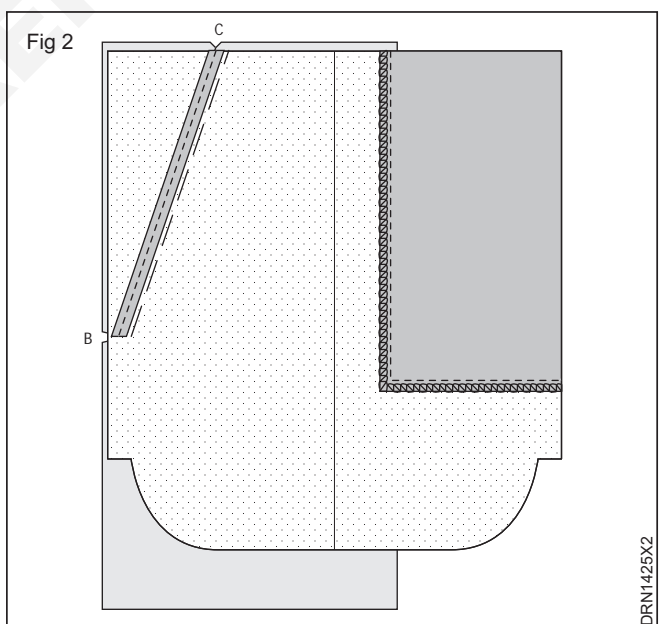


TASK 4: Prepare a slant pocket

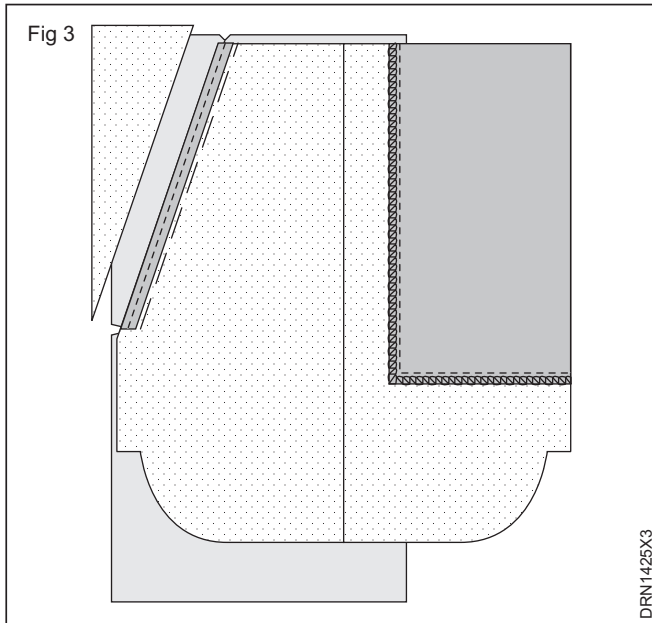
- 1 Take one jetting piece (15 x 8 cm), overlock one long and one short edge. (Fig 1) Take two pieces of casement (25 x 13 cm) and mark point A at left upper corner of the original/ piece on wrong side of the cloth. Mark a point B, 13 cm from A on the lower side and C, 5 cm from A on the upper edge. Cut notch by 1 cm on point B and small notch on point C. Join C and B (line should be drawn from the depth of notch at B to C). Trace the mark with tracing wheel to right side of cloth. (Fig 1) Draft and cut pocket pouch from lining material follow the instructions given in SS.No.3. (Fig 1)



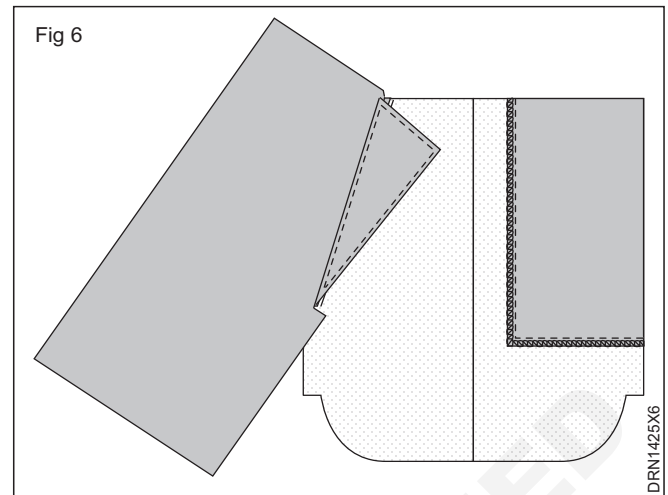
basting line on wrong side of the pocket pouch and stitch along the center of the tape. Place jetting piece on the other side of pouch piece with right sides together and raw edges matching at top and side. Baste and stitch along the overlocked edges. (Fig 2)



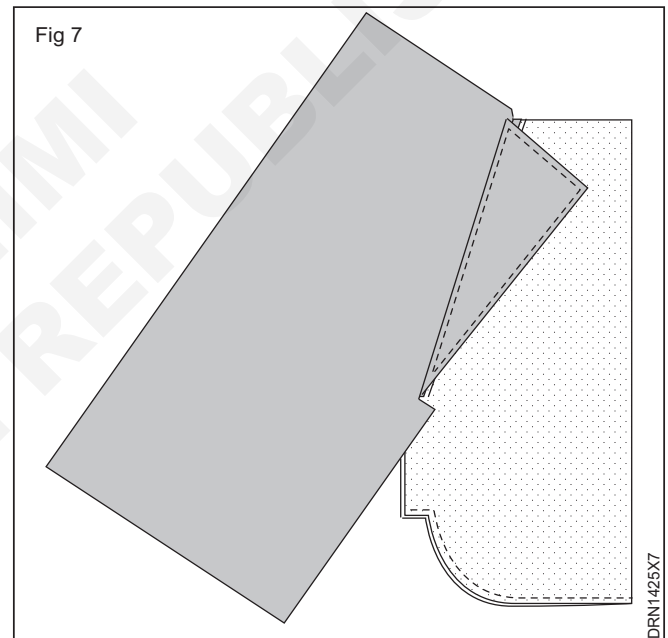
- 2 Place the pocket pouch on the original piece. With right side of pocket pouch and wrong side of original material together match side edges.
- 3 Baste both the pieces together from right side slightly away from the mark line BC. Cut a tape of thin cloth on straight grain (13 cm x 1 cm). (Woven tape/selvage of cloth can also be used.) Place the tape edge along the
- 4 Cut off the pocket pouch cloth along the outer edge of tape (Fig 3).
- 5 Fold the triangular portion of original cloth on mark towards wrong side on pouch piece and iron gently (Fig 4).
- 6 Turn pocket and original cloth together with right sides upwards. Make a top stitch from right side, 0.75 cm away from the folded edge (Fig 5).



- 7 Unfold original cloth and pocket pouch. Turn the raw edge of the original piece which forms a triangle inside by 0.5 cm and stitch with the pocket pouch. (Fig 6)



- 8 Fold the pouch piece lengthwise with right sides together and matching the round shape. Stitch the edge. (Ref.SS.No.3) (Fig 7)



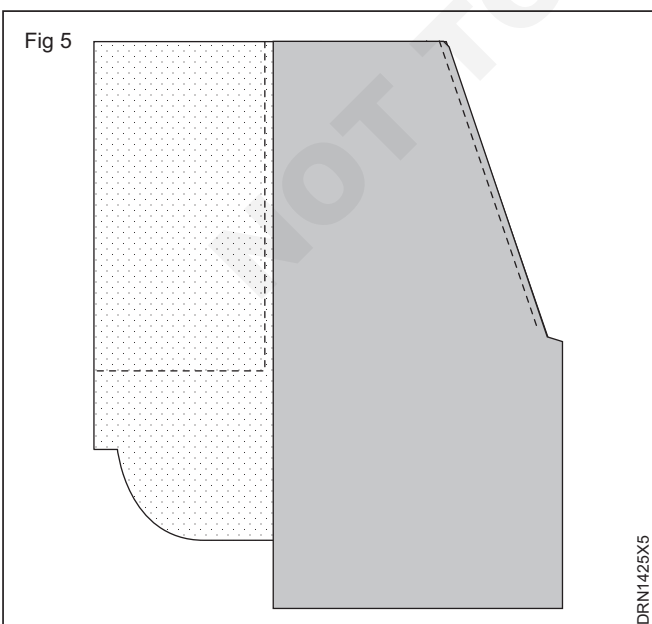
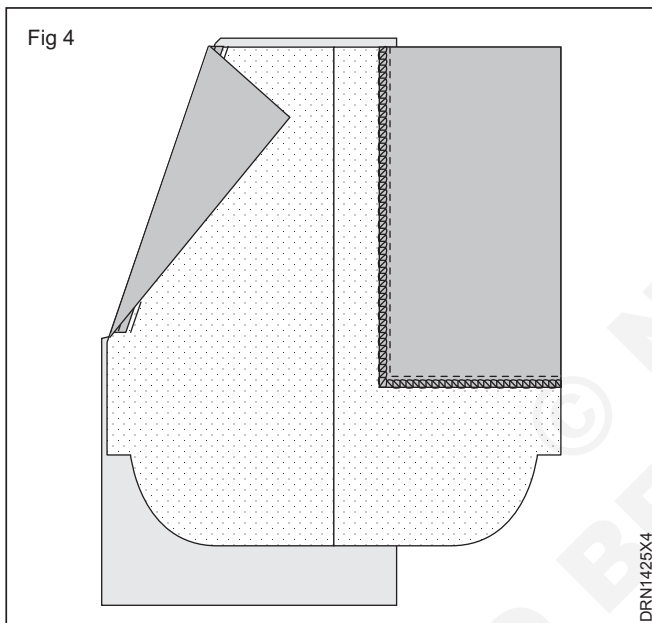
- 9 Turn the pocket pouch right side out and set the seam in center. Place the pocket mouth flat over the jetting piece matching side and top edges of pocket pouch and original piece.

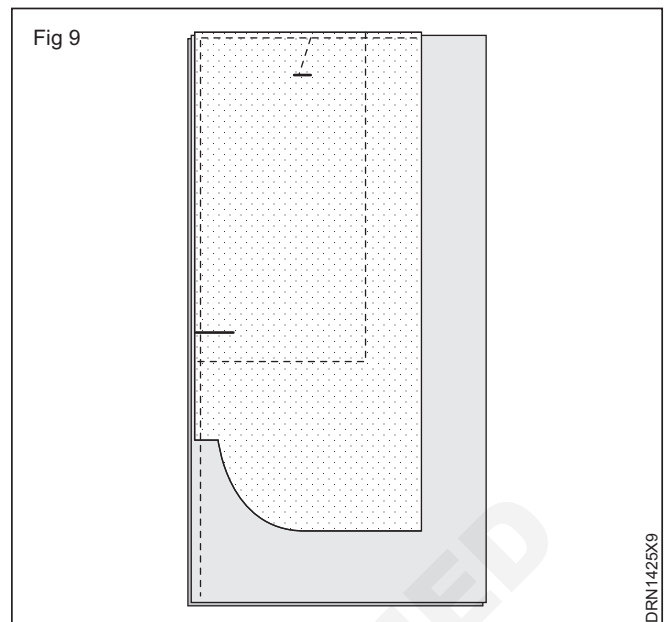
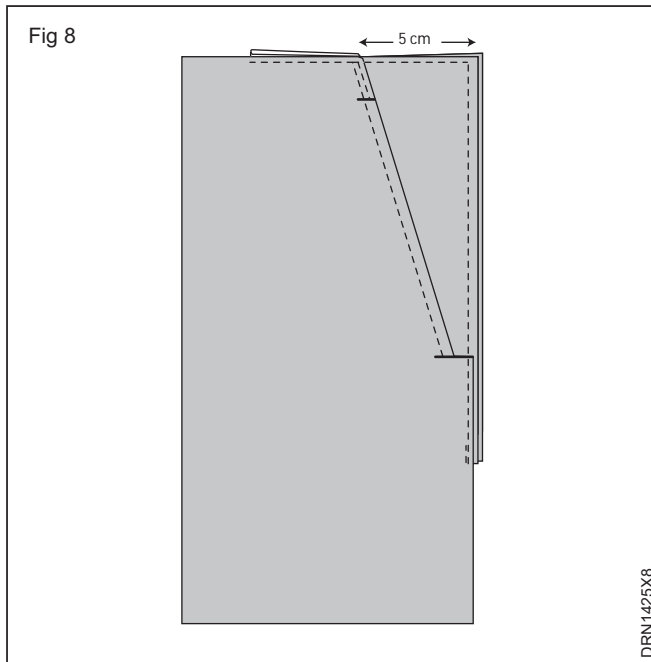
Take care that the top slant line of the pocket edge is placed 5 cm away from the top corner of jetting piece.

- 10 Baste side length of the original piece along with the jetting and pocket pouch below the pocket mouth and stitch on the top of pocket slant line 2 mm away from the folded edge up to 2 cm below the top edge and make firm tacking (Fig 8).

- 11 Take the other piece of the original cloth, place one over the other with right sides together, pocket pouch upwards.

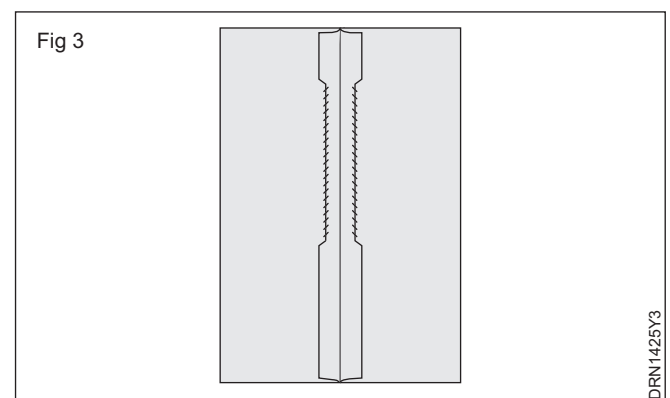
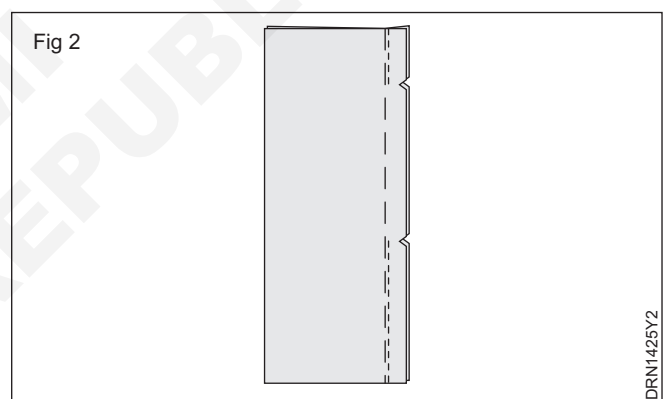
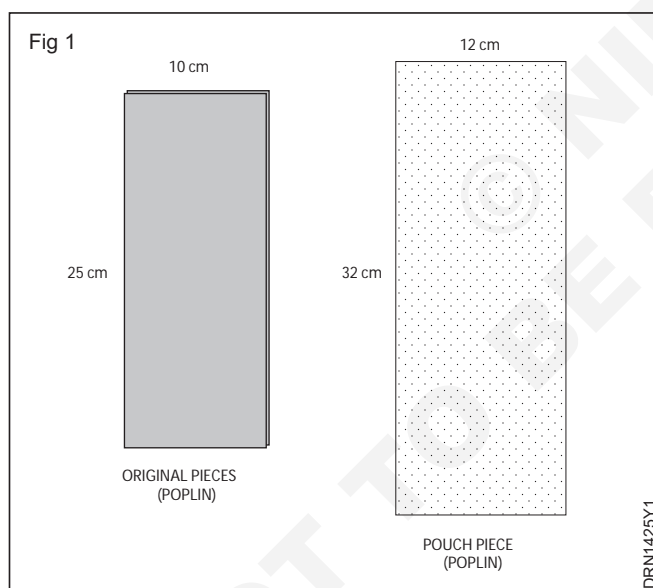
Stitch side seam leaving 1 cm seam allowance. (Fig 9)





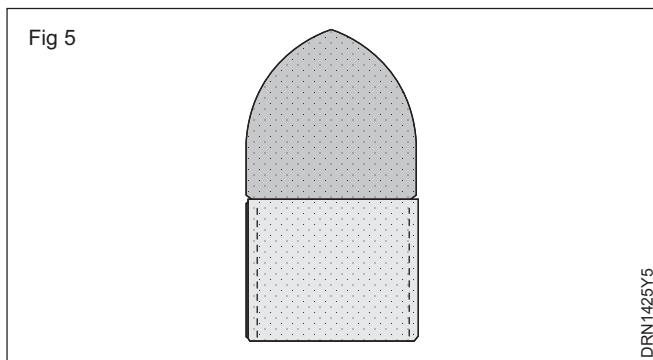
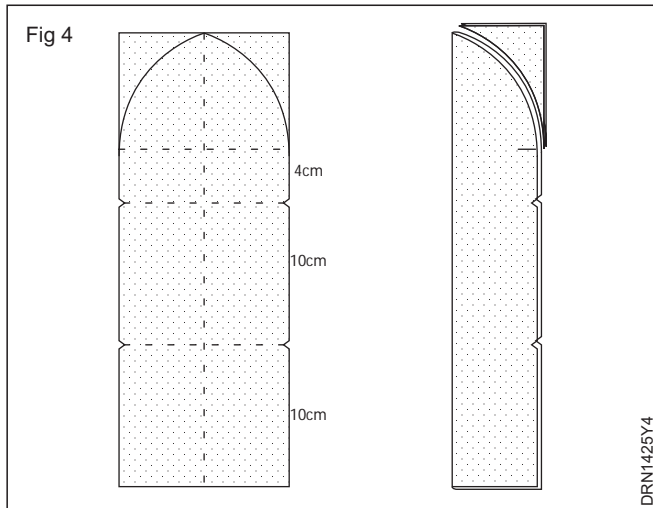
TASK 5: Prepare an inseam pocket for kurta

- 1 Take two pieces of poplin (25 x 10 cm) and one piece poplin (32 x 12 cm) for pocket pouch piece. (Fig 1)

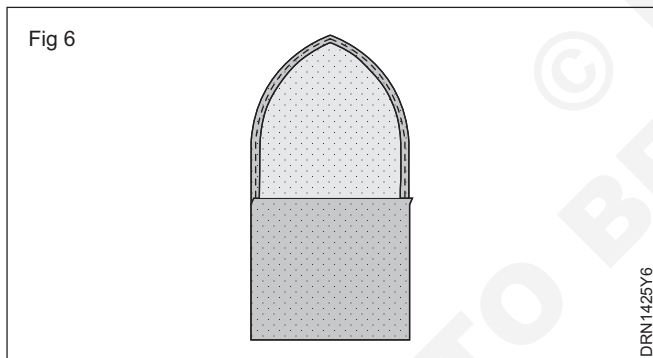


- 2 Place the casement pieces with right sides together, matching edges. Cut notch of 0.5 cm depth 4 cm away from top edge. Mark and cut another notch at the distance of 10 cm from the previous notch on the same edge. Baste both pieces on the same edge at a distance of 1 cm. Stitch with machine from top edge to the 1st notch and from bottom to the 2nd notch, leaving space between the notches open for pocket mouth. (Fig 2)
- 3 Remove basting and press the seam open. Turn the raw edges of seam allowance at pocket opening in side by 0.25 cm and finish hem by slip stitch or by machine (Fig 3).

- 4 Cut notches on the edge of the pouch piece at a distance of 10 cm and 20 cm from bottom, draw horizontal lines. Mark half the distance of the rest of the material. Fold the cloth vertically, draw shape and cut. (Fig 4)
- 5 Unfold the material, fold it horizontally on the lower line with right sides together. Stitch side edges on the folded part, leaving 0.75 cm seam allowance and 0.75 cm distance from the top edge. This top edge later will serve as a base (Fig 5) line for fixing the pocket pouch.



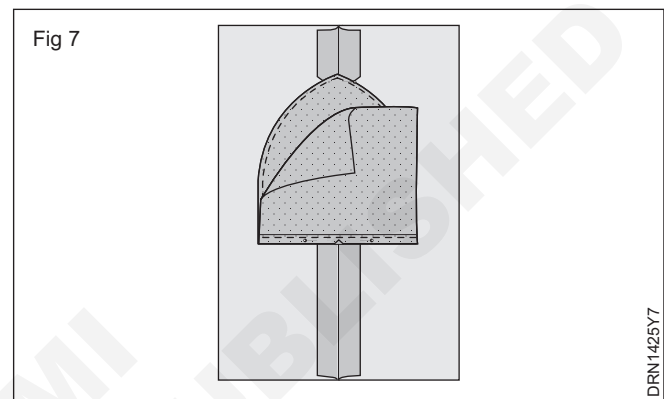
- 6 Turn the pocket pouch right side out and fold raw edges of shaped portion inside by 0.75 cm and baste. (Fig 6)



- 7 Cut a notch on the centre of the base line, fold the double portion of pouch over the shaped portion with right sides together, so that the base line is kept outside. Place notch of the base line on the centre seam line of the original cloth 1 cm below pocket mouth opening shaped portion upwards. Pin and baste pouch and original cloth on the base line and on the peak of the shaped portion.

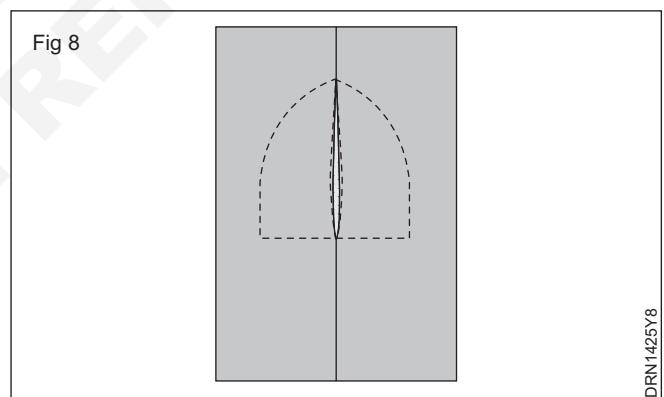
Take care that peak matches the seam line.

- 8 Baste also on the edges of the shaped portion. Stitch with machine on base line. Stop at end, pivot the material and bring down the double portion of the pouch. Continue stitching on the shaped portion. Lock seam at end (Fig 7).



- 9 Remove basting and press.

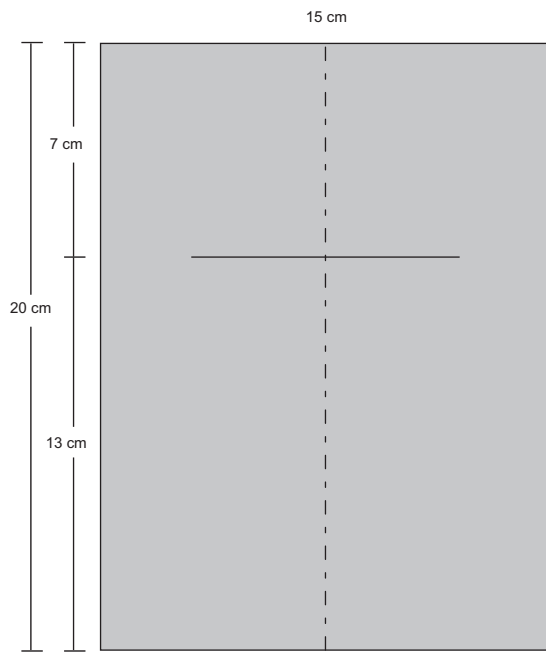
- 10 Appearance from right side of fabric. (Fig 8)



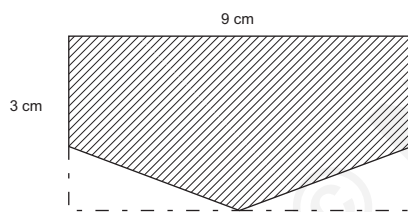
TASK 6: Prepare a hip pocket with welt and flap

- 1 Cut all the components as per drawing. Take original sample piece 15 x 20 cm. Mark center line.
- 2 Mark pouch piece: draw horizontal lines, 1st 3 cm from upper edge, 2nd 15 cm from upper edge.
- 3 Draw a horizontal line of 9 cm length on wrong side, 7 cm below the upper edge, leave 3 cm from each side. Copy the mark to right side by tracing wheel.
- 4 Prepare a paper pattern flap (9 x 4.5 cm). Mark 3 cm on both sides and join with the center point and cut on lines (Fig 1).
- 5 Place original flap pieces over each other. Right sides together. Place interlining piece over it. Lay the flap paper pattern on the interlining piece, 1 cm below the top edge and pin. (Fig 2)
- 6 Mark along the edges of flap pattern. Baste on marks leaving top edge. Remove pin and paper pattern. Stitch along basting, lock stitches at end.
- 7 Cut the extra material from all the 3 sides leaving 0.75 cm as seam allowance. (Fig 3)
- 8 Cut the corners only from the interlining piece. (Fig 4)

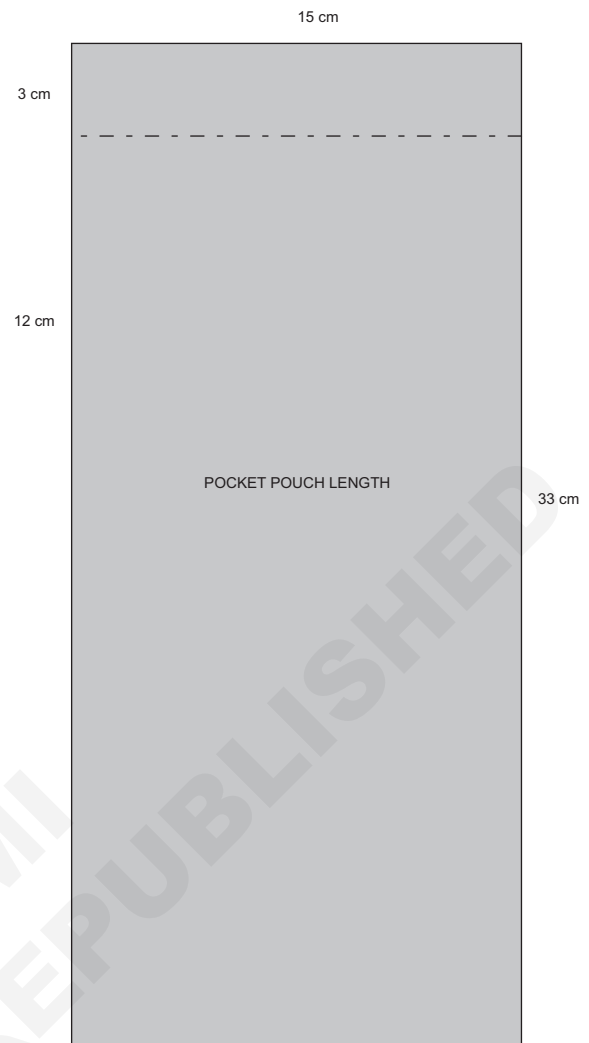
Fig 1



ORIGINAL CASEMENT PIECE

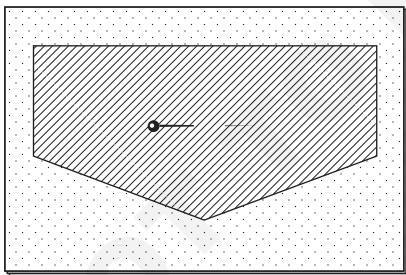


PATTERN FOR FLAP



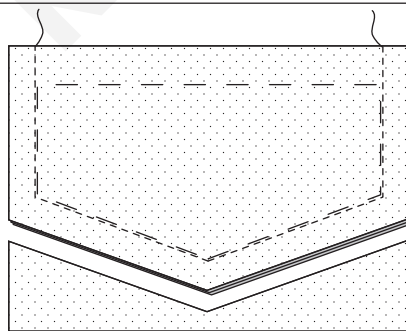
POCKET PIECE IN POPLIN

Fig 2



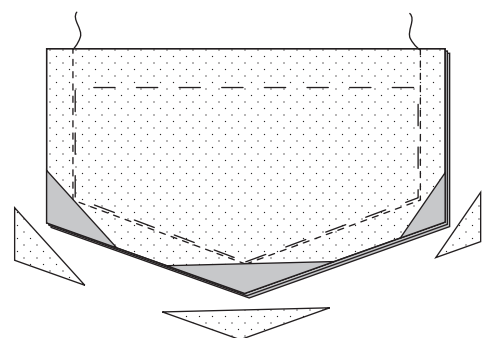
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Fig 3



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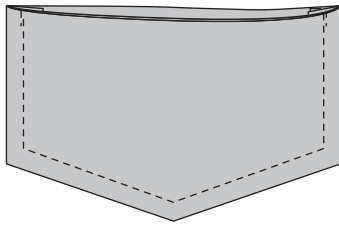
Fig 4



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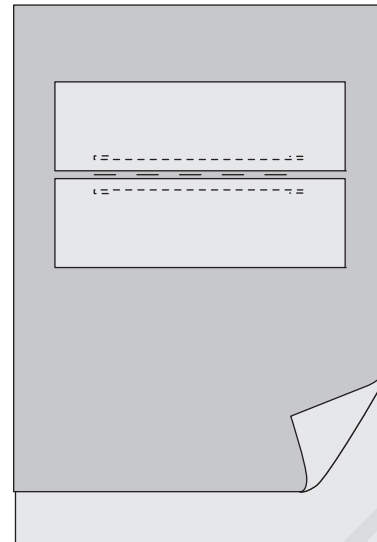
- 9 Turn the flap unit out maintaining the corner shape and press. Make top seam 0.5 cm away from the stitched edges. (Fig 5)
- 10 Take pocket pouch piece (15 x 33 cm). With wrong sides together place the pouch piece over main sample piece so that the top edge of pouch piece exceeds 3.0 cm above, the pocket mouth mark. Matching the center of both the pieces, baste along the mouth mark (Fig 6).

Fig 5



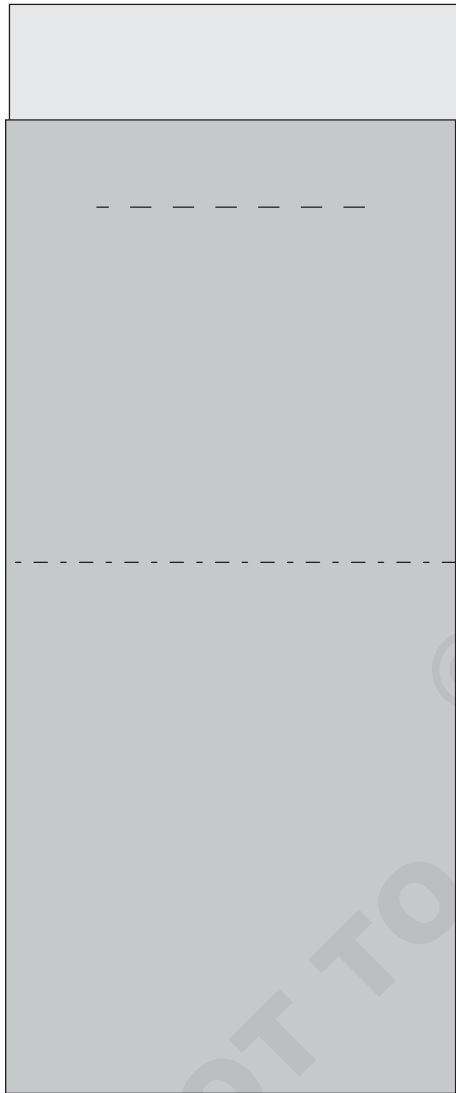
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Fig 7



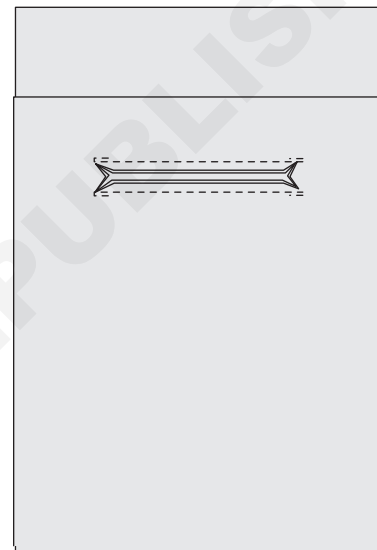
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Fig 6



DRN1425Z6

Fig 8

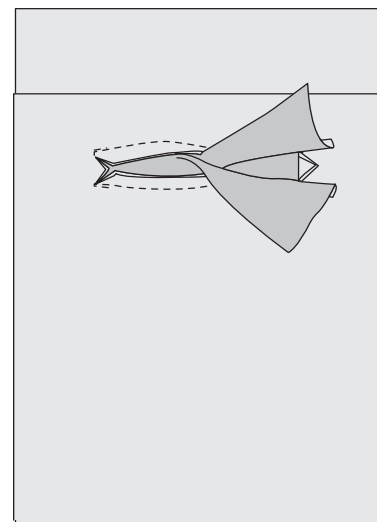


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- 11 With right sides together, place both the jetting pieces on the sample piece along with pocket mouth mark right sides together.
- 12 Baste and stitch 0.5 cm away from mark on both the sides only on pocket mouth. Look stitches properly. (Fig 7)
- 13 Remove basting and cut along the mouth mark through both the layers (main piece and pouch piece) very carefully. Stop 1 cm before ends, lift corners of jetting pieces and cut diagonally into the four corners forming small triangles at each end. (Do not cut into stitches and jetting pieces.) (Fig 8)

- 14 Gently push the jetting pieces through the cut to the wrong side. (Fig 9)

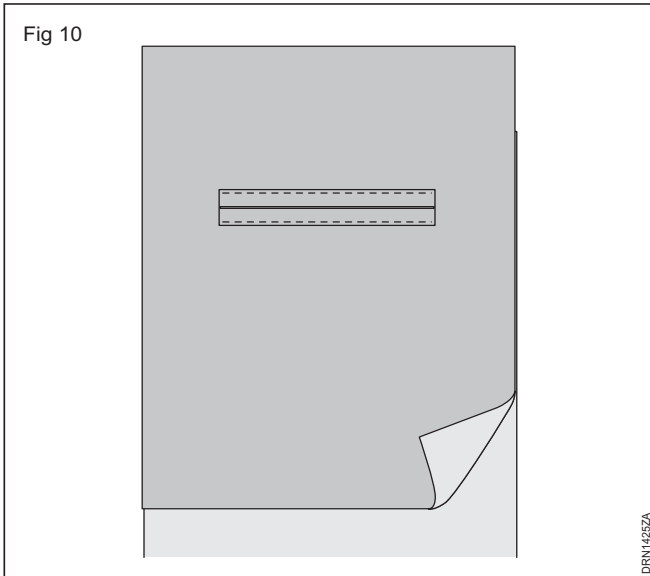
Fig 9



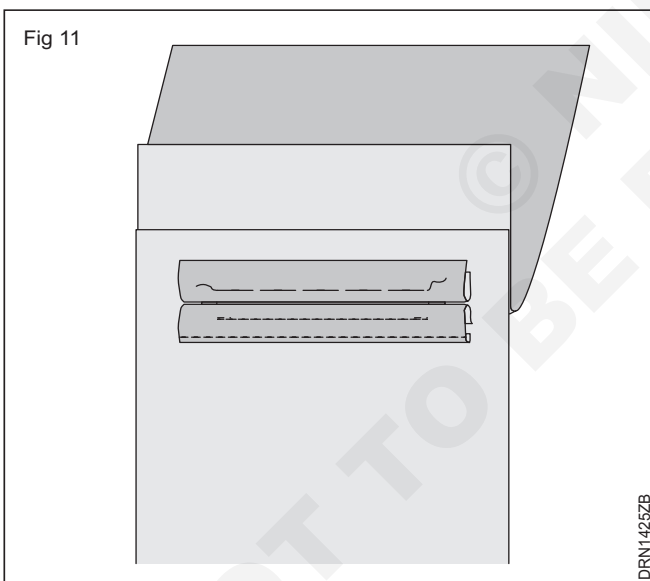
DRN1425Z9

15 Work from right side of the original piece.

16 Fold and press jetting to form 0.5 cm welts with their folds matching in the center of the opening. Baste along both the seam lines. Stitch along basting at lower crevice and lock the seam. (Fig 10)



17 Turn the whole unit to the wrong side. Fold the original piece back. Turn the lower edge of jetting piece by 0.5 cm inside and top stitch with pouch piece. (Fig 11)

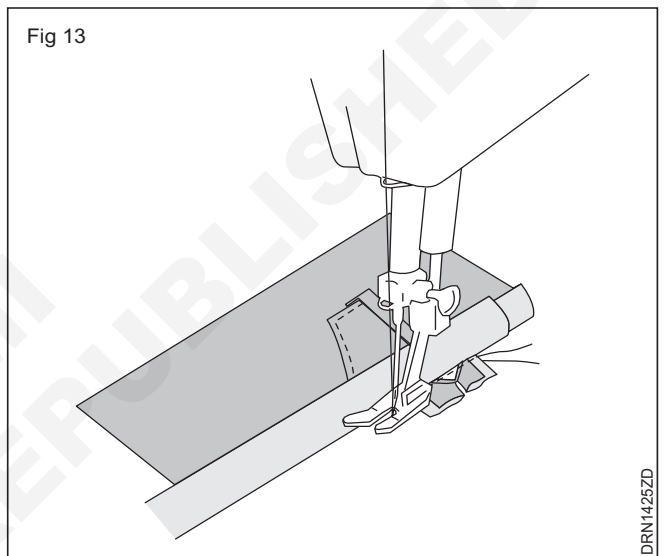
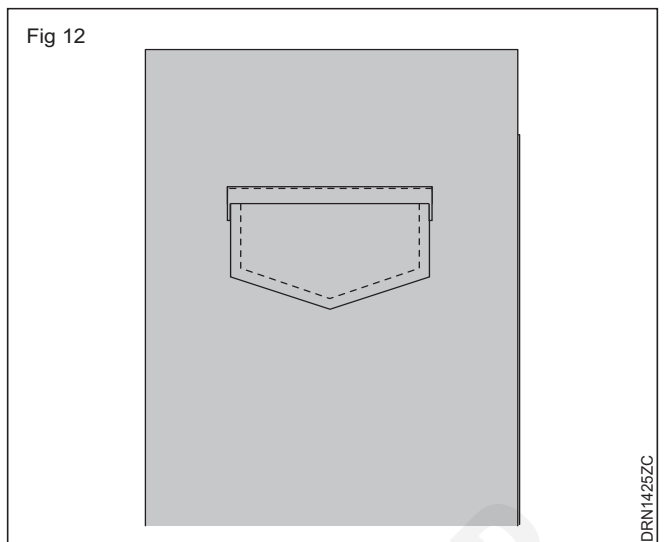


18 Take the prepared flap piece and insert it into the pocket mouth and match seam line on top of the flap with the seam line of upper welt and baste. Stitch at the upper crevice and lock the seam. (Fig 12)

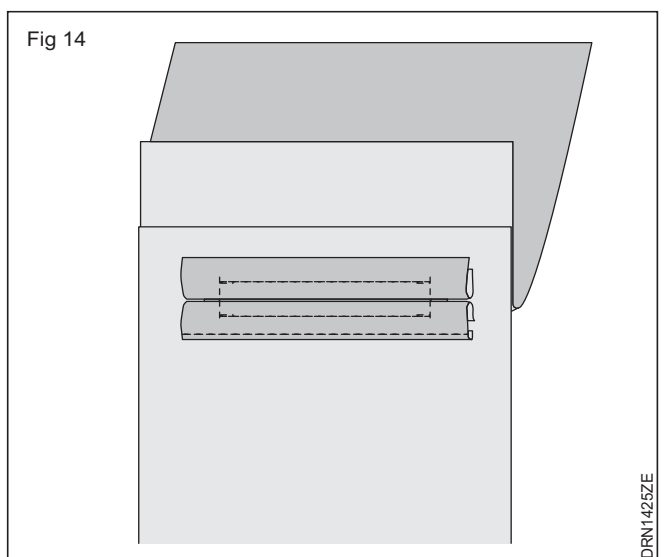
19 Place the sample on the machine right side up. Fold back the side edge of the original piece and pouch piece to expose tiny triangle at one end of the pocket mouth. Secure the end of triangle by double seam (care should be taken that stitch must be very close to the cut) (Fig 13).

20 Repeat the process for the other end.

Now work from wrong side:



21 Turn off long edge of pouch piece inside by 1 cm and fold the pouch on the marked line (horizontal) and baste the sides up to the waist line. Finish with double seam (Fig 14).



22 Stitch one bar one fan button hole in the center of flap, 0.75 cm away from the lower edge.

Stitch the button matching to button hole.

Make samples of collars

Objectives: At the end of this exercise you shall be able to

- prepare a peter-pan collar
- stitch open collar (rolled collar)
- stitch and fuse a mandarin (stand) collar
- stitch a shirt collar with stand.



Scan the QR Code to view the video for this exercise

Requirements			
Tools/Equipments		Materials	
• Single needle lock stitch machine	- 1 No.	• Poplin	- 0.40 x 0.90 m
• Iron box	- 1 No.	• Interlining	- 0.40 x 0.40 cm

PROCEDURE

TASK 1: Prepare a peter-pan collar

- 1 This collar is made of two separate collar units: for left and right side of the neck.
- 2 Prepare a paper pattern according to the draft and instructions. (Fig 1)

Fig 1 INSTRUCTIONS FOR DRAFTING

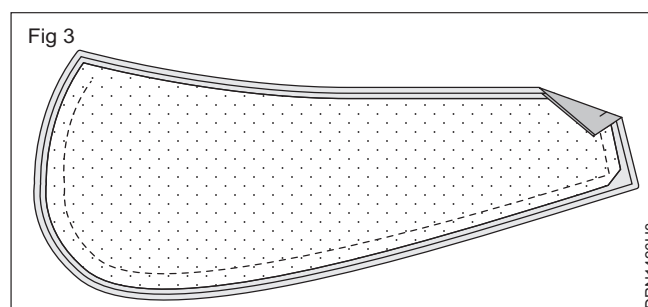
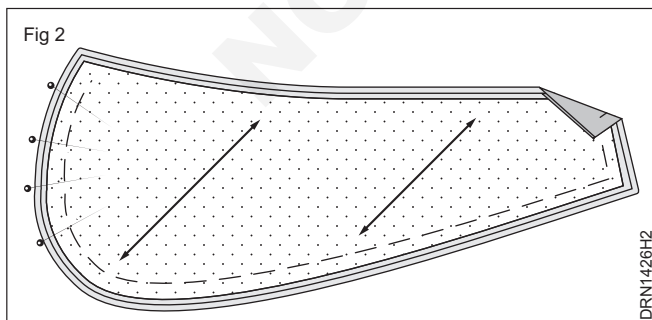
PETER PAN COLLAR

Square out horizontally and vertically from 0

0-1 = N/2	14 cm	
0-2 =	2.5 cm	Back collar width
2-3 =	0.5 cm	
1-4 = Ch/12	5 cm	
1-5 = 1/2 of 1-4	2.5 cm	Square out from 5
5-6 =	1 cm	
1-7 =	1 cm	
1-8 = 0-8 = 1/2 of 0-1	7 cm	Shape 7-8 (inner edge of collar)
		Shape 7-6-4-3 and join 3-0 (outer edge of collar)

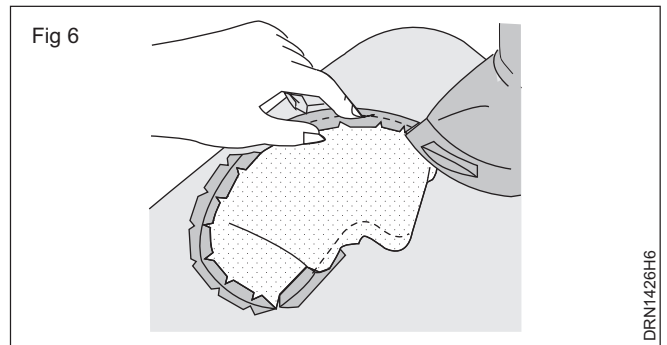
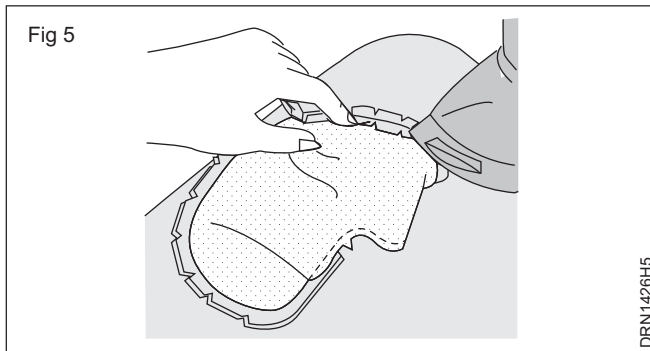
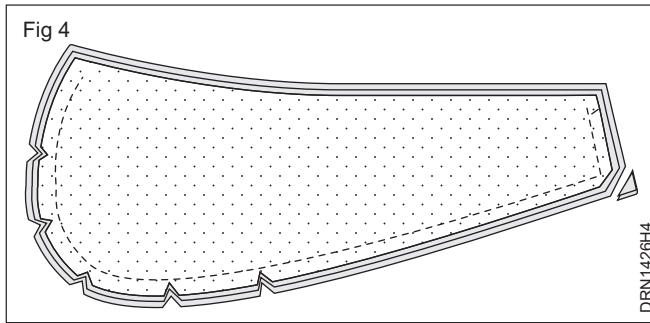
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- 3 Prepare a master pattern leaving 0.75 cm all around.
- 4 Lay the pattern on a cloth matching bias grains and cut three pieces from it. One piece is upper collar, one is under collar and one serves as interlining. Mark the three pieces.
- 5 With right sides together place under collar over upper collar. Place the interlining piece over upper collar. Match the corners of all the layers. Pin and baste through all three layers. (Fig 2)
- 6 Trim out the corner of interlining piece only.
- 7 Stitch along outer seam line maintaining the shape of curved shape and corner and leaving neck edge open. (Fig 3)



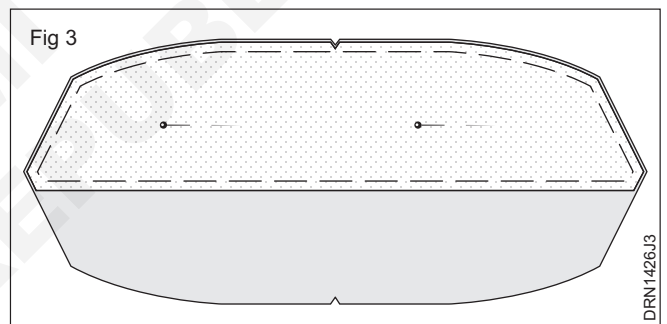
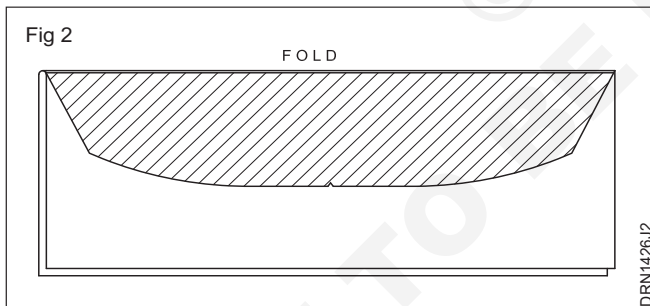
- 8 Trim the corner and clip fullness in seam allowance of curved shape. (Fig 4)
- 9 Press all seams open. (Fig 5)
- 10 Then press them towards the underside of collar (Fig 6).
- 11 Turn the collar unit with right side out. Bring seamline to under collar side and fix with diagonal basting. Then press.

Fusing or interlining is always attached with upper collar.

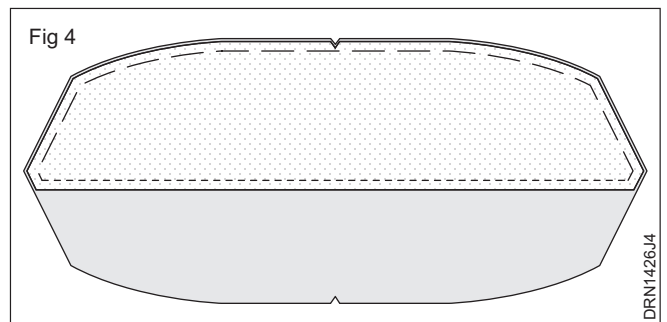


TASK 2: Stitch open collar (rolled collar)

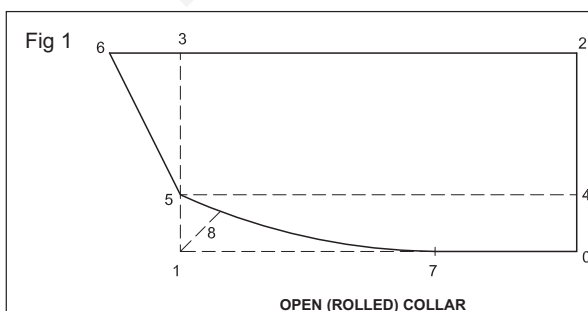
- 1 Prepare a paper pattern according to draft and instructions for drafting on double layered brown paper. (Fig 1)
- 2 Give 0.75 cm seam allowance on sides and lower edge. Cut the master pattern. Set balance marks on the centre of shaped edge. Lay the pattern on double layered sample cloth, mark and cut on the outlines. Transfer and cut balance marks. (Fig 2)



- 4 Stitch the interlining to the collar piece below the centre line leaving 2 mm from the edge. (Fig 4)



- 3 Cut the interlining material with the help of the pattern but extend horizontal centre line by 1 cm. Cut balance mark on the centre of shaped edge. Pin interlining on the wrong side of collar piece, balance marks and centre lines matching. Baste all around the interlining piece. (Fig 3)

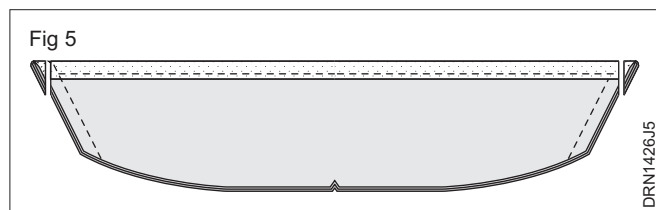


INSTRUCTIONS FOR DRAFTING

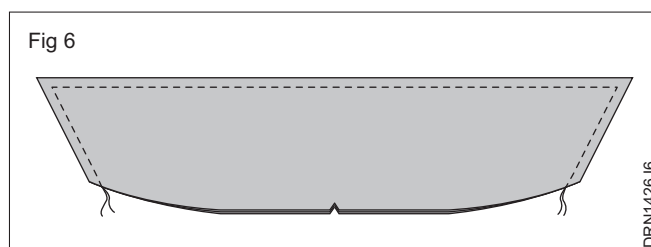
Square out horizontally and vertically from 0

0-1 = N/2	14 cm	Square up from 0 and 1
0-2 = 1-3 =		
Ch/12 + 2 cm =	7 cm	Join 2-3
0-4 = 1-5	2 cm	Join 4-5
3-6 =	2.5 cm	Join 5-6
0-7 = Ch/12 + 1 cm	6 cm	Divide angle 5-1-7
1-8 =	2 cm	Shape 0-7-8-5

- 5 Fold collar piece with interlining on centre line with right sides of collar together. Stitch on the sides leaving 0.75 cm from edges. Trim off the corners, take care not to cut the seam line. (Fig 5)



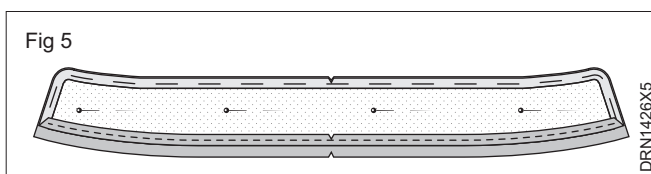
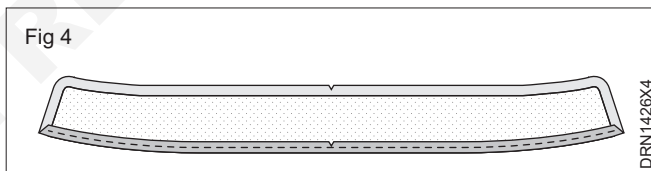
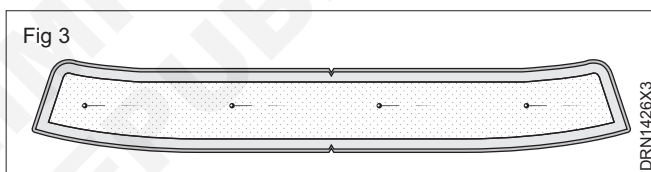
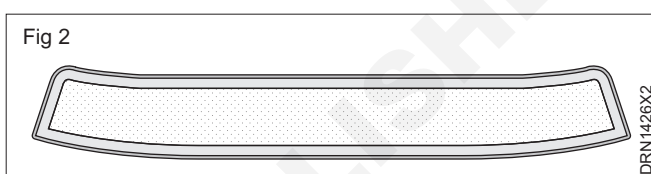
- 6 Turn the collar piece so that the right side is out. Use bodkin to pull out corners neatly. Top stitch from upper side of the collar on the three edges leaving 0.5 cm (Fig 6)



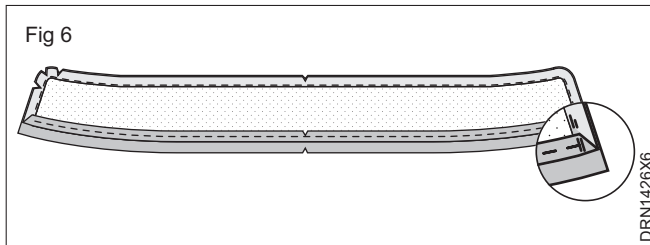
- 7 The notch in the lower edge of unfolded collar piece will later serve as balance mark for attaching collar to the neck.

TASK 3: Stitch and fuse a mandarin (stand) collar

- 1 Prepare a paper pattern according to the draft and instructions. Cut the pattern (Fig 1).
- 2 Transfer the pattern on fusible interlining and cut it on the outer lines without giving any allowances.
- 3 Lay this fusing piece over sample on wrong side of material (already cut to nearly same size). Match the grains. Pin and baste it.
- 4 Remove pins and fuse the interlining with iron. Cut the fabric leaving 0.75 cm seam allowance all around the fusing piece. (Fig 2)
- 5 Place this fused piece of collar over another piece of sample cloth matching grains and right sides together. Pin it and cut the excess material of under collar leaving also 0.75 cm seam allowance along the shape of fusing.
- 6 Place this fused piece on the upper edge of under collar, matching grains and balance marks. Pin and baste (Fig 5).
- 7 Stitch along the three edges 1 mm away from fusing through all layers. Stitch over turned lower edge but don't stitch over seam allowance of under collar piece. Leave 2 mm at the ends. Lock seam. (Fig 6)

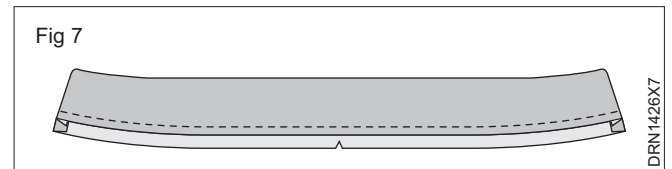


INSTRUCTIONS FOR DRAFTING			
	0-1 = N/2 =	14 cm	Square out horizontally and vertically from 0 Square up from 0 and 1 Join 2-3 Join 4-3 and extend from 3 Shape 5-6 Divide angle 7-4-1 Shape 0-8-9-7
	0-2 = 1-3 = Ch/24 =	2.5 cm	
	1-4 =	1.25 cm	
	3-5 =	0.75 cm	
	3-6 = 1/2 of 2-3		
	5-7 =	2.5 cm	
	0-8 = Ch/12 + 1 cm =	6 cm	
	5-9 =	2 mm	



- 8 Cut notches on shaped corners.
- 9 Press open the seam, then press seam allowances towards the under collar.

- 10 Turn the collar with right side out, pull out the corners neatly and press. (Fig 7)



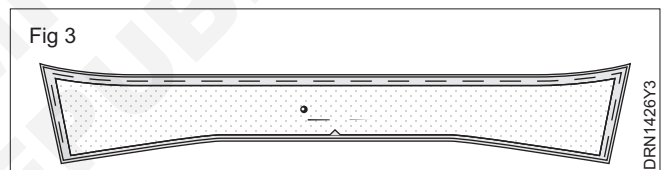
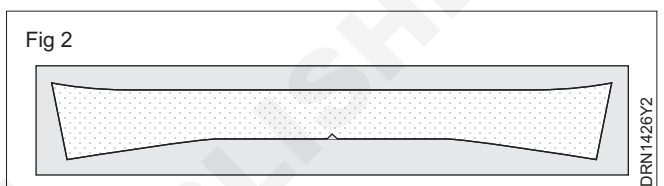
TASK 4: Stitch a shirt collar with stand

- 1 Prepare a paper pattern according to the draft and instructions. Give seam allowance of 0.75 cm only on the lower edge of collar part (line 2-7). Cut the pattern. (Fig 1)

By cutting on 2-10-14-7 make 2 separate pieces of collar and band.

- 2 Transfer the pattern of collar and stand part on fusible interlining and cut it on the outer lines.
- 3 Cut sample cloth according to pattern but give approximately 1 cm tolerance all around.
- 4 Lay the fusing piece over sample cloth on the wrong side of material along the grains. Pin and baste it.
- 5 Remove pins and fuse the interlining piece with iron. (Fig 2)
- 6 Trim the fabric leaving 0.75 cm seam allowance all around fusing, except on the lower edge of collar (allowance already added in paper pattern). Cut the pieces.
- 7 Place the fused piece of collar over the under collar of sample cloth matching grains and right sides together.

Pin and baste it along the shape of fusing and cut the excess material of lower cloth leaving also 0.75 cm seam allowance. (Fig 3)



- 8 Stitch the outer edge of collar having stitch 1 mm away from fused interlining. (Fig 4)

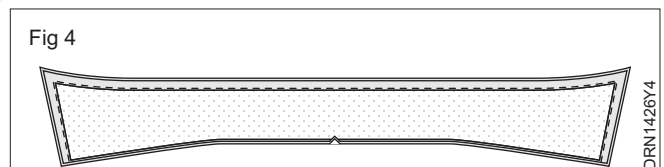
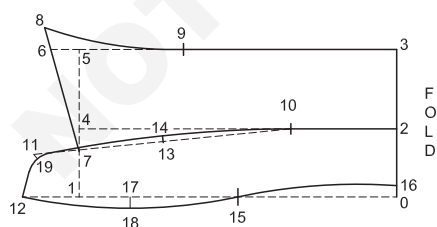


Fig 1

INSTRUCTIONS FOR DRAFTING



SHIRT COLLAR

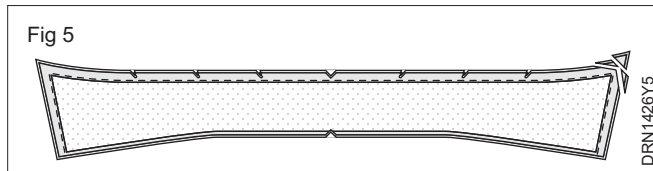
$$\begin{aligned} 0-1 &= N/2 = 14 \text{ cm} \\ 0-2 &= 3 \text{ cm} \\ 2-3 &= 3.5 \text{ cm} \end{aligned}$$

Square out horizontally and vertically from 0

Square out from 2 and 3, mark 4 & 5

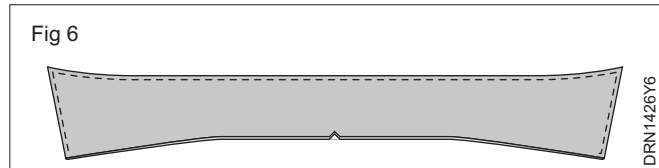
5-6 =	1.25 cm	
4-7 =	1 cm	Join 6-7, extend the line
6-8 =	1 cm	
5-9 = 1/3 of 5-3		Shape 3-9-8
2-10 = 1/3 of 2-4		Join 10-7 and extend the line
7-11 =	2 cm	
1-12 =	2.5 cm	Join 11-12
7-13 = 1/2 of 7-10		
13-14 =	0.5 cm	Shape 2-10-14-7-11
0-15 = 1/2 of 0-1		
0-16 =	0.5 cm	
12-17 =		
1/2 of 12-15		
17-18 =	0.5 cm	Shape 16-15-18-12
11-19 =	0.5 cm	Divide angle 7-11-12
		Shape 7-19-12

9 Cut notches on upper edge and trim corners. (Fig 5)

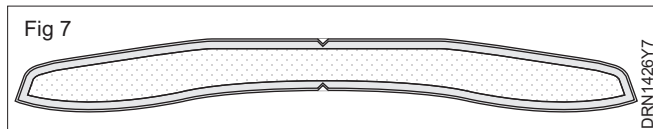


10 Press open all the seams, then press seam allowances towards the under collar.

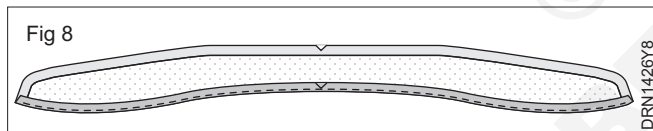
11 Turn the collar inside out. Use bodkin to pull out corners properly. Top stitch on fusing side on the upper edge and sides at a distance of 0.5 cm. Cut balance marks in centre of lower edge. (Fig 6)



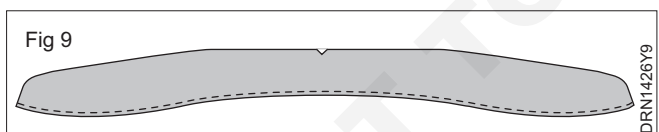
12 Transfer pattern of stand part on fusing material and cut without leaving any seam allowance. Repeat the same process for stand as earlier for the collar part until you have cut both sample pieces of cloth. Cut balance marks at the centre of upper and lower edge. (Fig 7)



13 Remove the basting. Remove also the lower stand piece. Take fused piece and turn the seam allowance of lower edge of cloth over the fusing. (Fig 8)

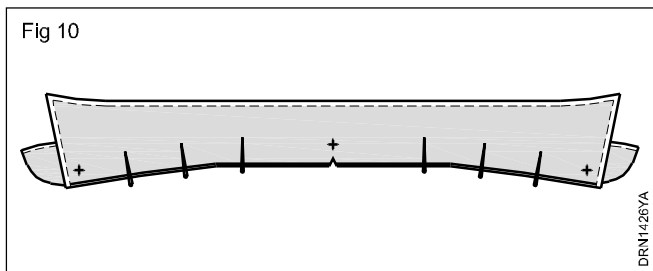


14 Baste and top stitch from right side a distance of 0.5 cm. (Fig 9)

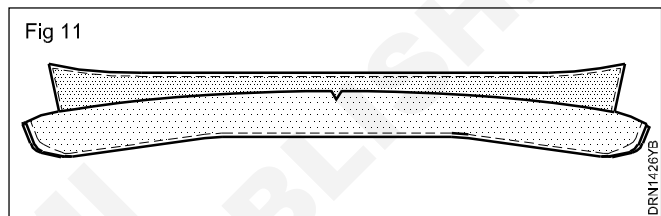


15 Join fused stand piece and collar piece, fused fabric sides together. Place the collar flat on stand piece. Tack first on centre balance marks, then adjust the collar on one side, edges of seam allowances matching. In this procedure you have to bend the collar to adjust the seam allowances. Pin along the seam allowances.

16 Repeat the process on the other side. Take care that both extensions of stand piece are equal. Baste and remove the pins. (Fig 10)

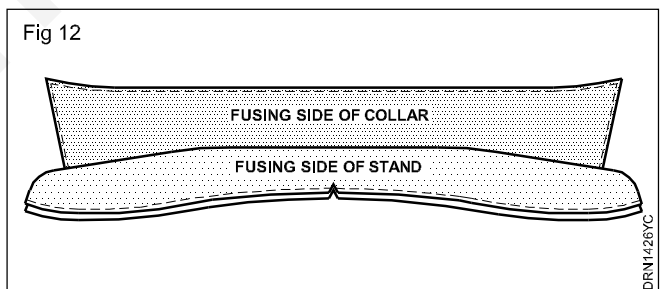


17 Place unfused stand piece over the under side of collar matching balance marks and the shape of fused stand piece. Take care that the edges of seam allowances are matching. Collar piece is now in between the two stand pieces - unfused stand piece is extending the fused stand piece on unfixed edge. Baste and stitch 1 mm away from fusing. (Fig 11)



Don't stitch over seam allowance of lower stand piece. Leave 2 mm at the ends. (Ref. SS.3)

18 Remove basting and turn stand pieces down. Finish and press. (Fig 12)





Scan the QR Code to view the video for this exercise

Make samples of sleeves

Objectives: At the end of this exercise you shall be able to

- make a sample of plain sleeve and bell sleeve
- make a sample of bishop sleeve, puff sleeve and leg o' mutton sleeve.

Requirements			
Tools / Equipments		Materials	
• Single needle lock stitch machine	- 1 No.	• Long cloth or poplin	- 1 m
• Scissors	- 1 No.	• Sewing thread	- 1 m
• Hand needle	- 1 No.		
• Ball pin	- 1 Box		

PROCEDURE

TASK 1: Make sample of plain sleeve

- 1 Draft the plain sleeve and cut in the fabric.

Measurements	Material
Sleeve length = 14 cm	Poplin
Chest = 60 cm	

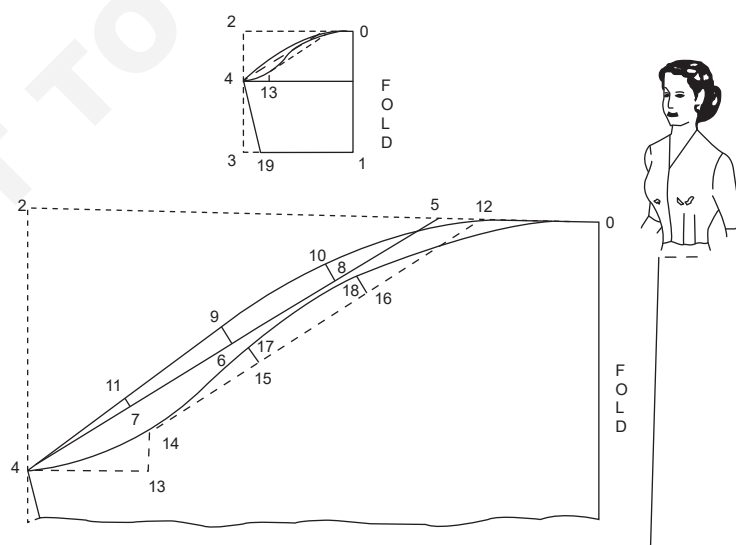
- 2 Stitch the shoulder seams and side seams. It is necessary to adjust the size of the sleeve cap seam line according to the armhole explained below. Stitch around top to sleeve on the seam line (Fig. 1).

- 3 Use firm machine stitch from under arm to first notch (k) change to large stitch between notches (K to K1) and then be to firm K1 to under arm point (B1). Draw up the loose stitches so that the sleeve cap seam line measured $\frac{1}{4}$ more than the armhole of the bodies section. Distribute the fullness evenly so that no gather is visible.

- 4 Hem the lower edge of the sleeve.

- 5 Stitch the side seams of the sleeves making sure that you are not making two sleeves for the same arm then attach the sleeve to the armhole. With the sleeve and garment right side out, hold the sleeve next to the bodice as shown in Fig 2.

Fig 1



Sleeve

0-1 = SL

0-2 = Ch/4 – 1 cm

2-4 = Ch/12 + 1.5 cm

0-5 = Ch/12 – 1 cm

7-11 = 0.3 cm

6-9 = 0.5 cm

8-10 = 0.5 cm

5-12 = 1 cm

4-13 = 3 cm

Square out horizontally and vertically from 0

Square down from 2 and mark 3

Join 4-5

Divide 4-5 into four equal parts and mark 6, 7 and 8

Square up from 7

Square up from 6

Square up from 8

Shape 4-11-9-10-0 (back shape of sleeve)

Square up from 13

13-14 = 1 cm

15-17 = 16-18 = 0.5 cm

3-19 = 2.5 cm

Join 12 and 14

Divide 12 -14 in 3 equal parts and mark 15 and 16

Square up from 15 and 16

Shape 4-14-17-18 and 0 (front shape of sleeve)

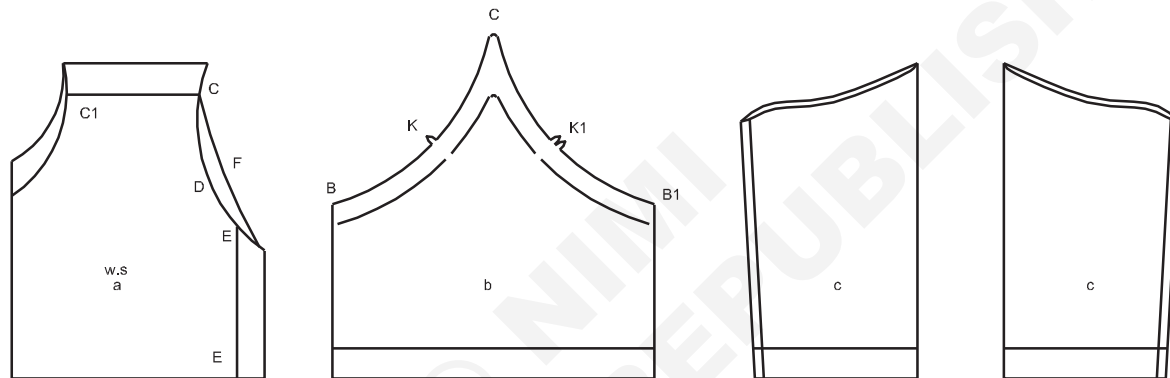
Join 4 and 19

The shape of sleeve crowns proportionately will be the same in all the Garments stitched. The exact measurement given shall help you to shape the crown initially, but also try to draw the shape free hand for practice.

- Hold the seam edges together out under arm and turn the bodice wrong side out as shown in Fig.2. pin the sleeve to the armhole matching the under arm seams and centre point (c) on sleeve to shoulder arm. Now

stitch the sleeve to the armhole. The seam allowance is turned toward the sleeve at the top and is left turned up at the under arm.

Fig 2



DRN1427H2

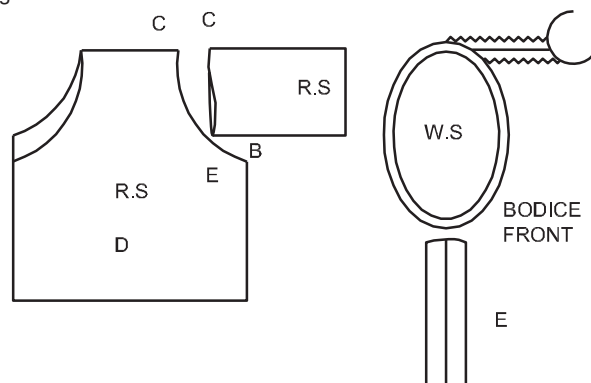
TASK 2: Make sample of bell sleeve

- Draft the bell sleeve and cut in the fabric.

Measurements	Material
Sleeve length = 14 cm	Poplin
Bust = 60 cm	

- Join the sleeve to the armhole after matching centre of sleeve to centre of shoulder point.
- Finish the lower hem of the sleeve
- The sleeve bottom is finished with narrow hem or with shaped facing. Join side seam

Fig 1



DRN1427J1

TASK 3: Make sample of bishop sleeve

1 Draft the bell sleeve and cut in the fabric.

Measurements

Sleeve length = 58 cm

Chest = 80 cm

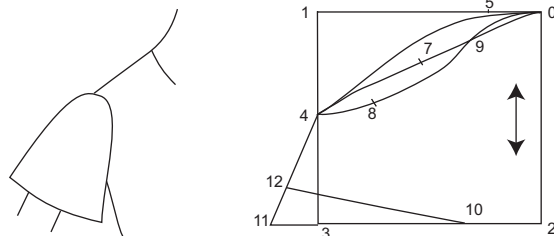
Cuff = 5 cm

2 Join the sleeve to the armhole after matching centre of sleeve to centre of shoulder point.

3 Finish the lower hem of the sleeve.

4 Join side seam

Fig 1



0 – 1 = $\frac{1}{8}$ chest

0 – 2 = sleeve length

3 is square down from 2

1 – 4 = $\frac{1}{8}$ Chest + 1.5 cm

0 – 5 = 2- 5 cm

Join 4 – 5

6 is mid way of 4 – 5

6 – 7 = 2cm

Shape back side 4 – 7 5 – 0

Square up from 4 – 8

4 – 8 = 5cm Join 8 – 5

Take 1cm above point 4

Shape front-side 4 - 8 - 9 – 0

2 – 10 = 5cm

3 – 11 = 2.5cm to 5cm

Join 11 – 4

11 – 12 = about 2.5cm,
shape 12 – 10

TASK 4: Make sample of puff sleeve

1 Draft the puff sleeve and cut in the fabric.

Puffsleeve

0 – 1 = The sleeve length + $6\frac{1}{2}$ cm for the puff

1 – 2 = $\frac{1}{4}$ Chest + $3\frac{3}{4}$ cm

2 – 3 = Half of 1 - 2 less $\frac{3}{4}$ cm

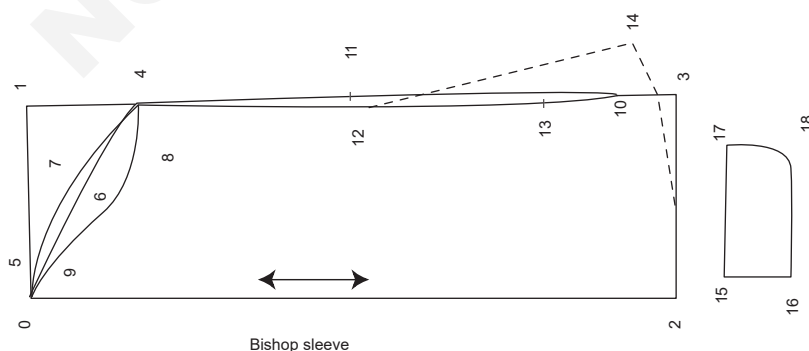
Join 3 & 0 with a straight line

4 – 2 = $2\frac{1}{2}$ cm

5 – 3 = One third of 4 – 0

2 Make two rows of ease stitches at upper sleeve shape.
2. 1st at a distance of 0.5cm, 2nd at a distance of 0.75cm. 3. Start stitches 5-6 cm from raw edge and stop also 5-6 cm before the other edge. leave long threads. Stitch sleeve side seam. Pin the centre of sleeve crown.

Fig 1



0 – 1 = One – eight bust + 6.5cm

0 – 2 = Sleeve length + 2cm for fullness less Cuff-width

For points 3 to 9, so

2 – 3 = Same as 1 – 0. Join 3 – 1

1 – 4 = B/8

0 – 5 = 2.5cm 6 is mid way of 4 – 5

6 – 7 = 2cm

Shape back-side 4 – 7 – 5 – 0

Square up from 4 – 8

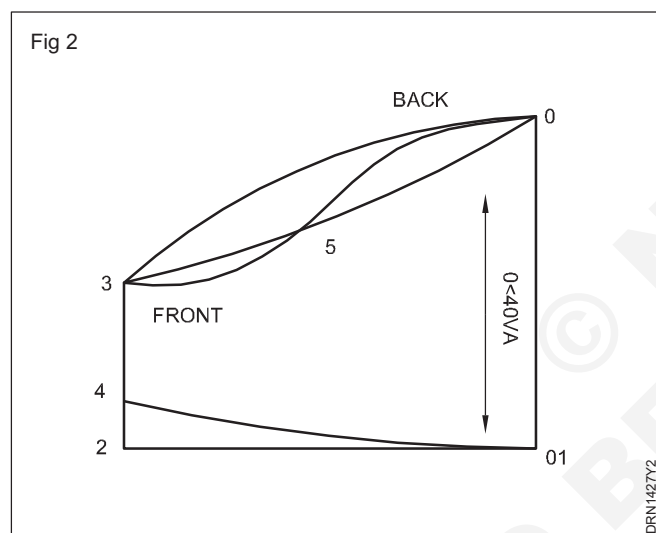
4 – 8 = 5cm for ladies and

4cm for girls garments

Join 8 – 5 Taking 1 cm above

10 – 3 = 2cm

- 3 Stitch sleeve side seam pin the centre of sleeve crown on shoulder, with right sides together and leaving seam allow.



Shape 10 – 2

11 is midway of 10 – 4

12 11 = 1.5cm

Shape 4 – 12 and 12 – 10

10 – 13 = B/8 + 1.5cm for opening

If more fullness at the bottom is required, add 12 – 14 – 10 as shown.

Cuff: - Proportion for cloth,

Not canvas. Square line from 15, fold at 16 – 15

16 – 15 = Cuff width + 1.5cm

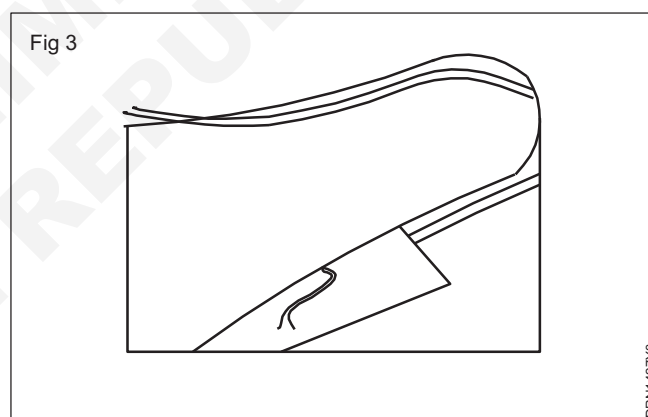
17 – 15 = ½ Cuff width + 1.5cm

18 – 17 = same as 16 – 15

Join 18 – 16

If required, take a curve at 18

- 4 Gather on sleeve crown 3 cm. on both sides of shoulder seam while pulling the long thread ends from both sides
- 5 Pull until the girth of sleeve is equal with the girth of armhole
- 6 Baste sleeves to bodice armhole then stitech with machine.



TASK 5: Make sample of leg o' mutton sleeve

- 1 Draft the leg o' mutton sleeve and cut in the fabric.

Measurements

Sleeve length = 12.5 cm

Chest = 60 cm

Sleeve pound = 18 cm

0 – 1 = 1/8 chest + 6.5 cm + 1.5 cm for looseness

0 – 2 = 6.5 to 10 cm according to gathers at the top

3 – 1 = Same 2 – 0

4 – 2 = Sleeve length + 1.5 cm

5 – 3 = Same 4 – 2 join 4 – 5

Material

Poplin - 17 cm

6 – 3 = 1/8 chest

7 – 0 = 4 cm

Shape 6 – 9 – 7 – 0 and 6 – 10 – 11 – 0

12 – 5 = 2.5 cm join 6 – 12

13 – 4 = 2.5 cm

join and shape 12 – 13

14 – 13 = ½ sleeve round + 1.5 cm

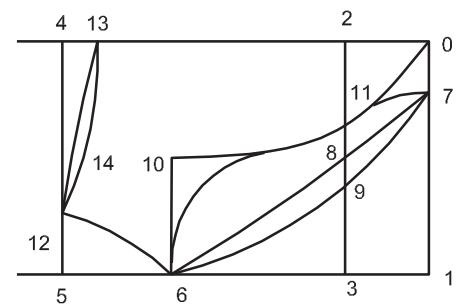
Suppress the distance 10 – 12 in the dart at 13. Keep 2 cm inlays at 12 – 6.

- 2 Stitch the side seam and shoulder seam of the bodies.
- 3 Set the sewing machine for long stitches at by adjusting the stitch regulator

- 4 Work a row of large machine stitches at the top of the sleeve edges.
- 5 Prepare pull the formed stitches at both ends to form gathers.
- 6 Sleeve bottom 3 or 5 darts are stitch
- 7 Prepare a bias strip to the required length of the sleeve round and the width of 2 cm.
- 8 Keep the right side of the bias piece to the right side of the lower edge of the sleeve and give machine stitch.
- 9 Make 5 cm fold on the other side of the bias band and bring the folded edge over to the wrong side of the sleeve, just covering the row of large running stitch.
- 10 Hem the folded edge of the sleeve on the wrong side.

- 11 Measure the armhole and sleeve round, stitch the side seam of the sleeve.

Fig 1



DRN14271

Practice of fixing fasteners as buttons

Objectives: At the end of this exercise you shall be able to

- attach sew through buttons by hand
- attach a sew through button and to form a shank
- attach press studs
- attach metal hooks and to prepare an eye bar from thread.

Requirements			
Tools/Instruments			
• Hand needle	- 1 No.	• Sewing thread	- 1 spool
• Scissors	- 1 No.	• Buttons (4 holes)	- 6 Nos
Materials		• Press studs	- 8 Nos
• Long cloth	- 0.30 x 0.90 m	• Metal hooks	- 8 Nos

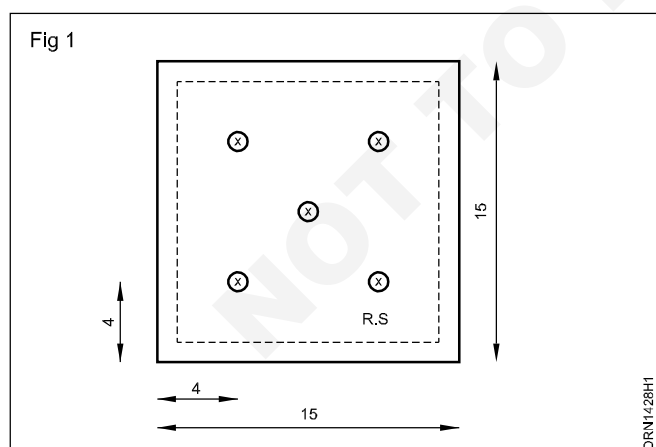
PROCEDURE

TASK 1 : Attach sew-through buttons by hand

- 1 Take a piece of Long cloth (30 cm x 90 cm) mark and cut it into 12 square pieces of 15 x 15 cm, i.e. 6 widthwise and 2 lengthwise.
- 2 Take 2 pieces, place one over the other and stitch all around by machine leaving 1 cm from the edge.
- 3 Insert single thread into the needle.

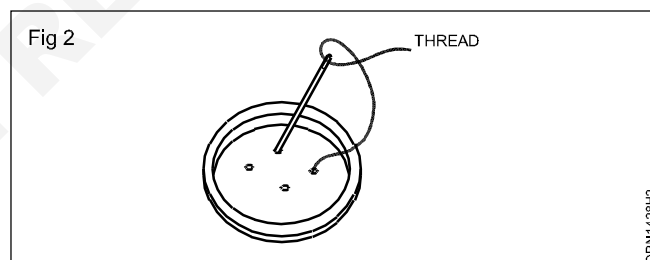
Don't knot at any end of the thread

- 4 Set 5 marks on cloth, one in centre, the other four grouped around at a distance of 4 cm away from the edge. (Fig 1)

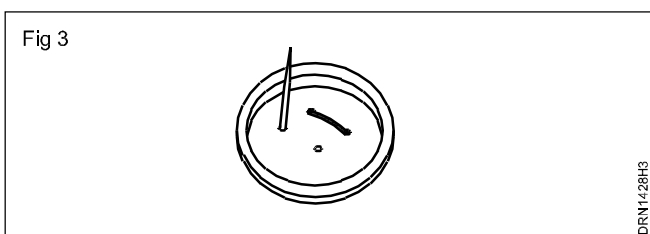


- 5 Hold the fabric by left hand and insert the needle from right side of the fabric at mark, right angled to the fabric. Pull the needle with thread leaving 1 cm thread at the right side.
- 6 To secure thread make stab stitch: hold the thread end with left hand thumb and insert the needle into the fabric very near (ie. 1 mm) to the 1st insertion from wrong side.

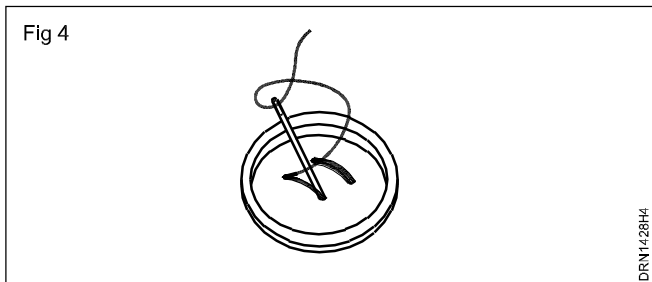
- 6 Repeat the last two steps. Cut loose thread end from the upper side. Centre the button upon the mark directly on the stab stitch.
- 7 Bring needle through the button from one hole and back into the fabric by other hole and pull the thread. (Fig 2)



- 8 Repeat the process twice.
- 9 Bring the needle from the underside of the fabric through the remaining holes of the button. (Fig 3)



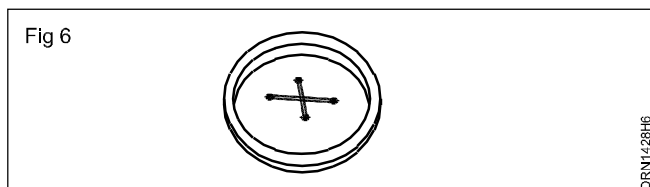
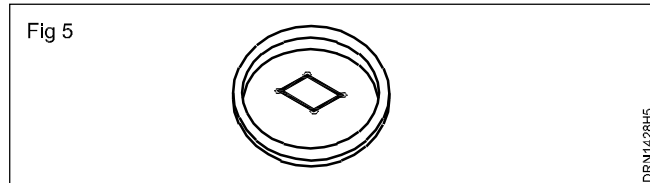
- 10 Then bring back into the fabric through the other hole left. (Fig 4)
- 11 Repeat the step four more times.
- 12 To secure the thread, insert the needle into the thread of the last stitch below the fabric, leave a loop, pass the needle through the loop and pull the thread. Repeat the process one more time.



13 Fix another button on a mark on the cloth in the same way.

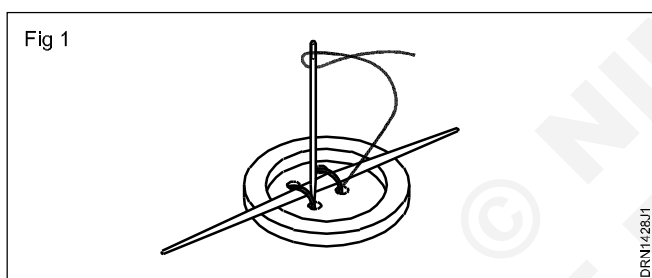
14 Attach 2 buttons in square shape. (Fig 5)

15 Attach 1 button crosswise. (Fig 6)



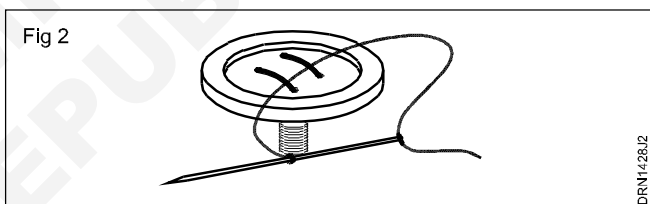
TASK 2: Attach a sew-through button and to form a shank

- 1 Take another 2 pieces (15 x 15 cm) and stitch all around with machine. Set 5 marks (Task 1).
- 2 Secure the thread as described (Task 1).
- 3 Bring needle through the button from one hole.
- 4 Lay a pin/toothpick/match-stick above the button, stitch across top of the pin from underside through one hole and take needle down to other hole. (Fig 1)



5 Repeat two or more times.

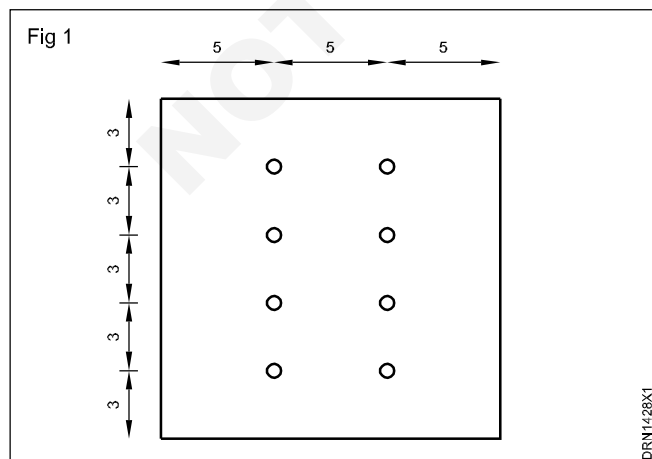
- 6 Bring the needle up from the remaining hole of the button and back into the fabric by the opposite hole.
- 7 Repeat two or more times.
- 8 Remove pin or stick and lift button away from the fabric, so stitches are taut.
- 9 Wind thread firmly under the stitched button thread to make shank. (Fig 2)



- 10 Secure the thread with a stitch into the shank, form a loop and pass the needle through it. Tighten the thread.

TASK 3: Attach press studs

- 1 Take 4 pieces of cloth (15 x 15 cm) machine stitch 2 pieces together so that you get 2 sets. Mark position for fixing ball parts on one and socket parts on another set. (Fig 1)

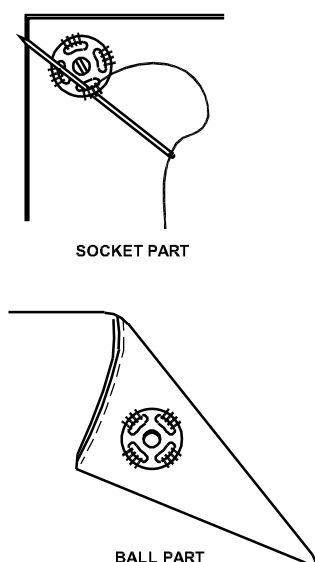


- 2 Thread the needle with a double thread (both cutted ends are passed through the needle eye). To secure thread, insert the needle in the cloth downwards on the marking, bring out the needle upwards at a distance of 2 mm, pull the thread partly and pass the needle through the loop at the end of the thread.
- 3 Fill one hole of the ball part by four buttonhole stitches with double thread. Pass the needle between button and fabric to the next hole beside.

In case of double layered cloth you can also pass the needle between the two layers of the fabric.

- 4 Fill the other holes of the ball part in the same manner. (Fig 2)
- 5 Secure the thread from the underside of the cloth with back stitch and cut. Take the other set of cloth. Place socket parts of stud over the mark and stitch in the same way as the ball part.

Fig 2



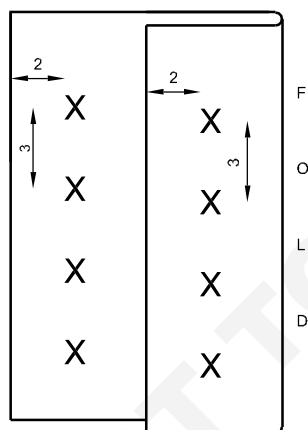
DRN1428X2

Take care that the stitching areas of the socket and ball part are not covering each other, otherwise press studs will open easily.

TASK 4: Attach metal hooks and to prepare an eye bar from thread

- 1 Take 2 pieces of cloth (15 x 15 cm) and prepare double layered set.
- 2 Set 4 marks for attaching eye bars at a distance of 3 cm from the left edge of the cloth and for hooks at a distance of 3 cm from the right edge on reverse, ie. the underside of the fabric. (Fig 1)

Fig 1



DRN1428Y1

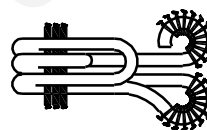
- 3 Secure the double thread at one of left marks by stab stitch (or by loop). Place hook over the mark.

Take care for the right direction of hook and eye bar, so that the cloth forms a tube after closing the fasteners.

- 4 Fill both the holes of the hook by 5 to 9 button hole stitches in each hole.

- 5 Pass needle and thread buttonhole through the fabric to the neck of the hook and make three stitches around the end of the hook neck to hold it flat on the fabric (Fig 2)

Fig 2



DRN1428Y2

- 6 Secure and cut the loose threads - **eye bar**. To make a thread-eye-bar, mark two points in the total length of the eye (0.5 cm) centered over one mark. Insert the double threaded needle at one mark, secure thread and bring it from the underside of the fabric to the other mark. Take the needle to the first mark from the upper side of the cloth, and repeat three times. Cover all the strands of thread on the upper side of the cloth with closely spaced buttonhole stitches. When finished, bring the needle and thread to the underside of the cloth and secure stitches. (Fig 3)

Fig 3



ROUND EYE LOOP

DRN1428Y3

Practice of making button hole by hand

Objectives: At the end of this exercise you shall be able to

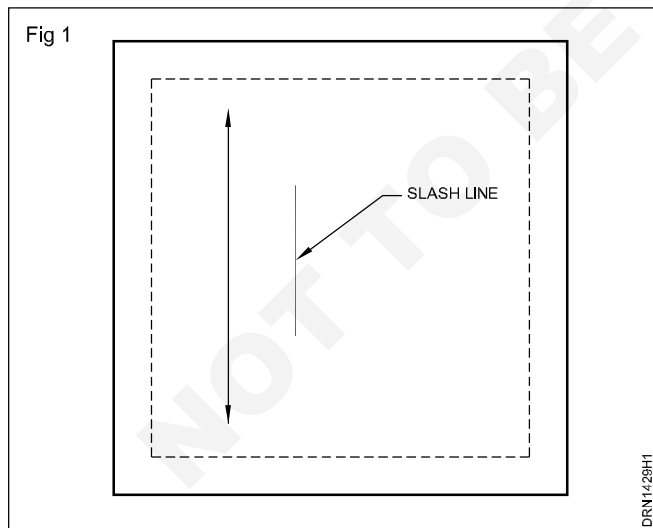
- prepare one-bar-one fan button hole by hand
- prepare a corded key hole button hole by hand
- prepare a bound button hole by hand
- cut and stitch shirt/ pant button holes by zigzag machine.

Requirements			
Tools/Instruments		Materials	
• Scissors	- 1 No.	• Thread	- as reqd
• Scale	- 1 No.	• Fabric	- as reqd
Equipment/Machines			
• Zigzag machine	- 1 No.		

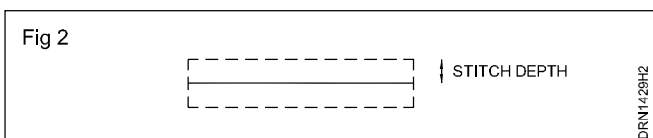
PROCEDURE

TASK 1 : Prepare one-bar-one fan button hole by hand

- 1 Take 2 pieces of 15 x 15 cm. Cover one by the other congruently in warp direction with wrong sides together and stitch around with machine leaving 1 cm seam allowances from all edges. For marking position of buttonhole, draw a line of 15 mm with pencil at the centre of the stitched piece in warp direction. This line is called slash line. (Fig 1)



- 2 Place a row of machine stitches around the slash line (2mm away from slash line). (Fig 2)

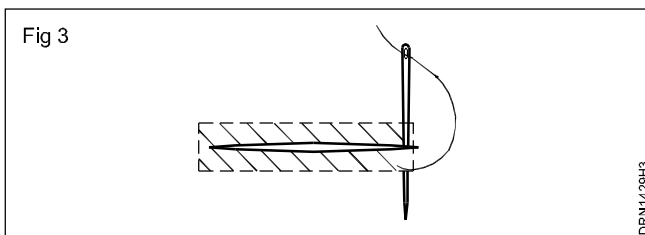


Machine stitches must be approx. 6 stitches per 1 cm.

- 3 Set the buttonhole scissor according to the buttonhole, then cut along the slash line with buttonhole scissors using one thread of fabric as a guide.

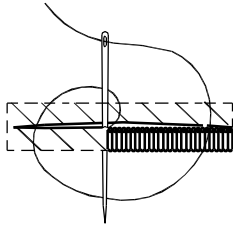
Scissors must be sharp and pointed.

- 4 Overcast the raw edges of the slit by hand with single thread, keeping 3 stitches per cm and length of 2 mm. (Fig 3)



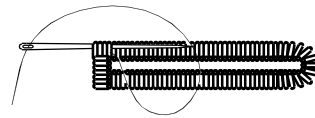
- 5 Hold the fabric by left hand and start filling the overcast edge from one end by buttonhole stitches covering the machine stitched line. Take the stitches close side by side at a regular distance maintaining even tension in each stitch. (Take suitable thick thread or twisted double thread.) (Fig 4)
- 6 At the outer end spread, 5 to 7 stitches in fan shape. (Fig 5)
- 7 Fill the remaining cut by buttonhole stitches. On the end make two stitches taking full width of both worked out edges for bar tacking. (Fig 6)
- 8 Fill bar tack stitches by buttonhole stitches. (Fig 7)

Fig 4



DRN1429H4

Fig 7



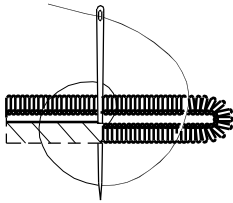
DRN1429H7

While filling bar tacks with buttonhole stitches, the needle should catch one thread of the previous buttonhole stitches of either side.

Dip the needle in the end of the bar tack to the under side of the cloth and make two locking stitches catching bar tack thread and few threads of cloth. Trim the thread. Repeat the process for practice and perfection.

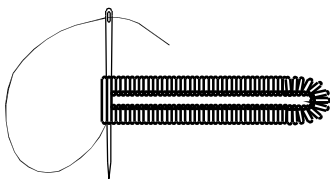
After you have gained perfection there is no need of setting a stitch line around the slash line.

Fig 5



DRN1429H5

Fig 6

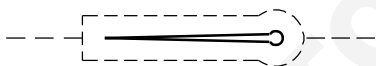


DRN1429H6

TASK 2 : Prepare a corded key hole button hole by hand

- 1 Take two pieces of cloth 15 x 15 cm.
- 2 Mark the buttonhole position at the centre of the piece. Punch a hole of approx. 2 mm diameter with a stiletto at the right end of marking. Machine stitch around the buttonhole mark, 2 mm away from the slash line and the hole. Cut on the marking with scissors up to the end of mark. (Fig 1)

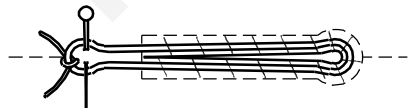
Fig 1



DRN1429J1

- 3 Use a length of cord to fit loosely around the buttonhole, knot it at the ends and secure with pin. Overcast over the cord. Keep the cord within 2 mm from the slashed edge. (Fig 2)

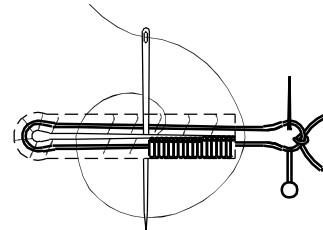
Fig 2



DRN1429J2

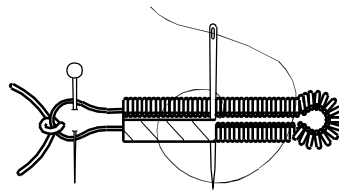
- 4 Turn the fabric so that you start to work out the buttonhole from right lower side. (Fig 3)
- 5 Work out the buttonhole in the similar process of one-fan-one-bar buttonhole covering the cord and maintain the straight edge of cut and the round of hole. (Fig 4)

Fig 3



DRN1429J3

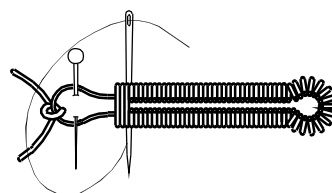
Fig 4



DRN1429J4

- 6 Make bar tack in the end. (Fig 5)

Fig 5

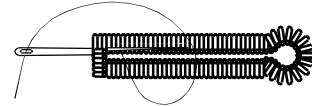


DRN1429J5

Hold both ends of the cord, remove the pin, pull slightly and cut off the excess cord, before filling the bar tacks. (Fig 6)

Repeat the process for practice and perfection.

Fig 6

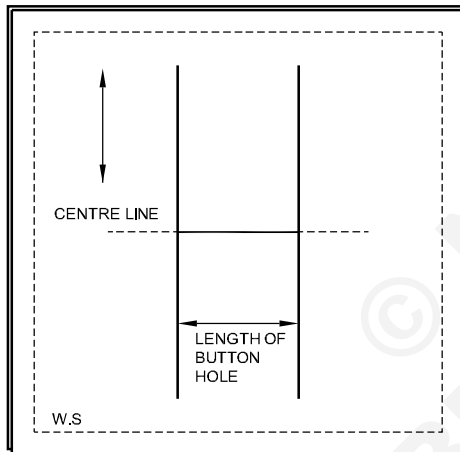


DRN14/29J6

TASK 3: Prepare bound button hole by machine

- 1 Cut two pieces of cloth 15 cm x 15 cm, stitch together on the all four edges as done for other buttonholes. Cut one lip piece of same cloth 6 cm long and 5 cm wide.
- 2 Mark buttonhole position on the centre of the big piece 3 cm long, along the grain line on the wrong side of the cloth.
- 3 Make running stitch on the mark. Extend the stitches by 2 cm on each side of the mark which will appear on the right side of the cloth. (Fig 1)

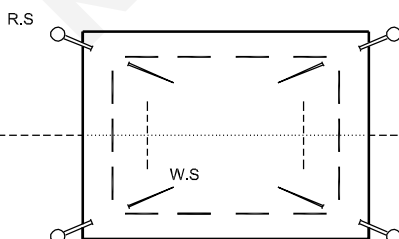
Fig 1



DRN14/29X1

- 4 With the right sides together place the centre of the lip piece on the buttonhole mark keeping 6 cm long side of lip piece along the buttonhole length mark. Maintain middle position. Pin four corners of the lip piece with the original piece. (Take care that the lip piece remains extended by 1.5 cm on both ends of the mark) Paste all round 0.5 cm away from the edge. (Fig 2)

Fig 2



DRN14/29X2

- 5 On the wrong side, mark two lines with pencil 3 mm away on either sides of the buttonhole mark. Start stitching on the marks from the middle of one side and make a rectangle (overlap few stitches over the starting point). (Fig 3)

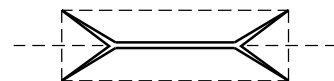
Fig 3



DRN14/29X3

- 6 Slash layers on the buttonhole mark with a sharp pointed scissors leaving 0.75 cm from each end. Clip diagonally all the four corners. (Fig 4)

Fig 4

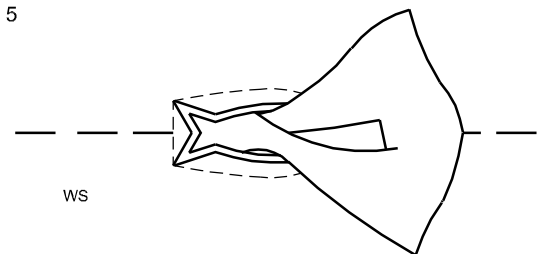


DRN14/29X4

Take care that the stitching thread is not cut in the corners.

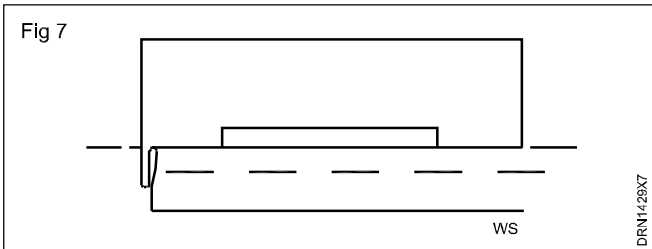
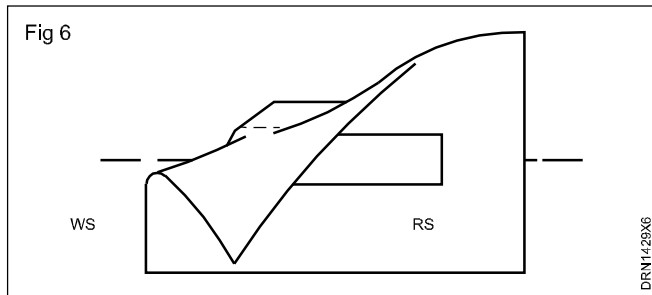
- 7 Turn the lip piece on the wrong side through the hole. (Fig 5)

Fig 5



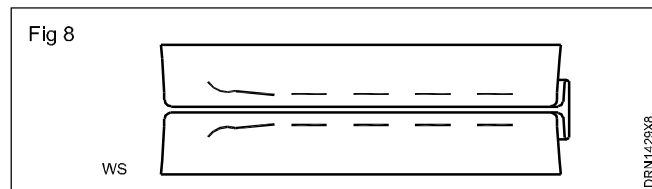
DRN14/29X5

- 8 To square the corners pull both ends of the lip piece tightly so that the corners come out clean. (Fig 6)
- 9 Push forward the lip cloth towards centre line by 3 mm forming lip and best on it slightly away from the ditch of seam on the right side. (Fig 7)



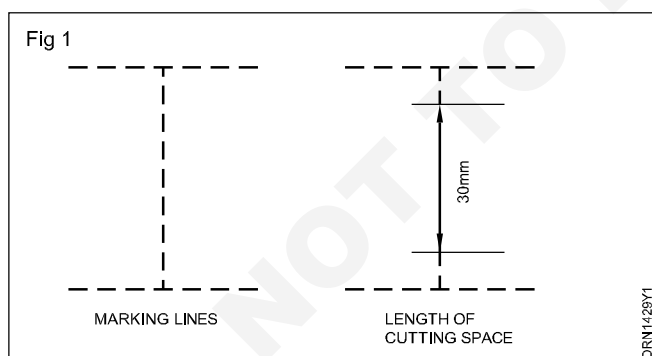
10 Repeat the same process for the other side lip. (Fig 8)

Take care that width of both lips is 3 mm and that lips meet in the centre line.



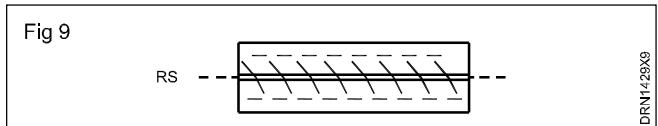
TASK 4: Cut and stitch shirt/ pant button holes by zigzag machine

- 1 Take one piece of cloth 15 cm x 15 cm on double as taken in one-fan-one-bar buttonhole. Determine the size of buttonhole length 14 mm and the effective length of buttonhole ie. 10 mm and mark on the cloth on warp direction. (Fig 1)



- 2 **Setting the machine:** Set Zig-Zag holing foot in place of presser foot. Set needle position with selector, set stitch width selector at 1.5 mm width (Fig 2).
- 3 Place marked piece under needle, aligning centre marking of buttonhole with slot in the presser foot (Fig 3).
- 4 Position the needle in the fabric at point 'A'. Lower the foot and stitch to the end of marking up to point B. Drop the needle in the fabric at point 'B'. Make a stitch of 2

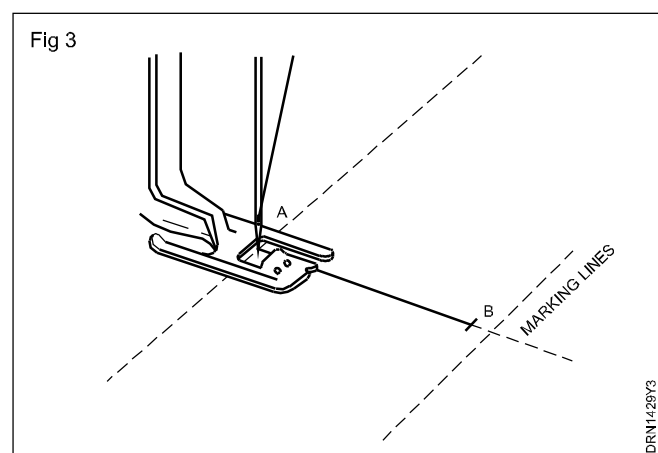
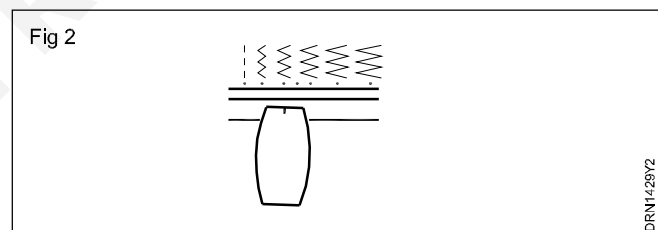
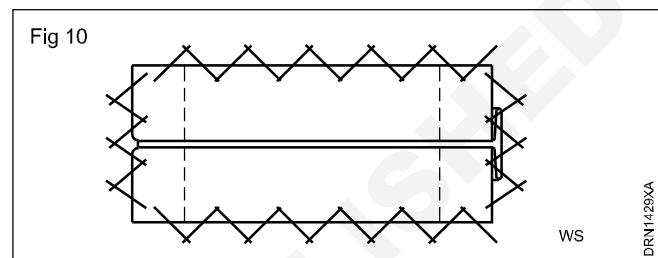
- 11 To hold the lips together use diagonal basting on the right side. (Fig 9)



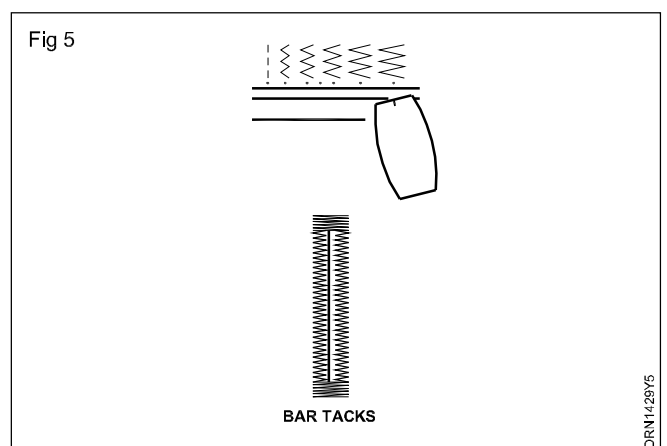
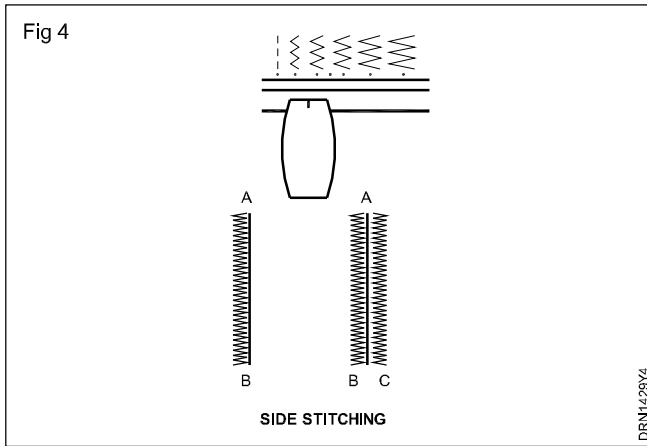
- 12 Fasten the edges of lip piece on the wrong side with herringbone stitch catching only one layer of the original cloth. (Fig 10)

Press and baste the edges of lip piece before herring bone.

- 13 Prepare in total 5 bound buttonholes.



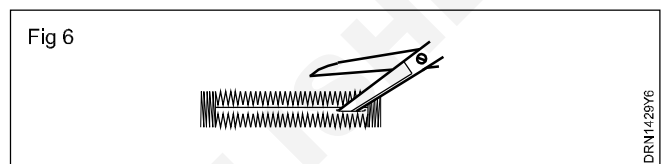
mm from B to C. Adjust the stitch regulator for reverse stitch. Stitch other side of the buttonhole back to starting point. (Fig 4)



- 5 Adjust the stitch width selector for bar tack at 3.5 mm; make 6 stitches. At the end make a double stitch for strengthening (or leave 2 cm long thread and make a knot at underside). Take out the fabric and finish the bar tack in the same way as at the other end. (Fig 5)
- 6 Remove the cloth from the machine and trim the loose threads. Slash in the centre with seam ripper or pointed sharp scissors. (Fig 6)

Take care, not to cut the bar tack thread.

- 7 or practice repeat the process in the same way.



Practicing of darning and patching

Objectives: At the end of this exercise you shall be able to

- darn a hear and a hole
- stitch a plain patch, a hemmed patch and a decorative patch.

Requirements

Tools/Instruments

- Darning needle - 1 No.
- Hand needle - 1 No.

Materials

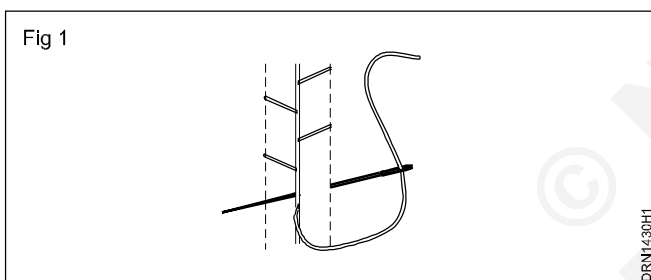
- Worn out garments
- Patcher

PROCEDURE

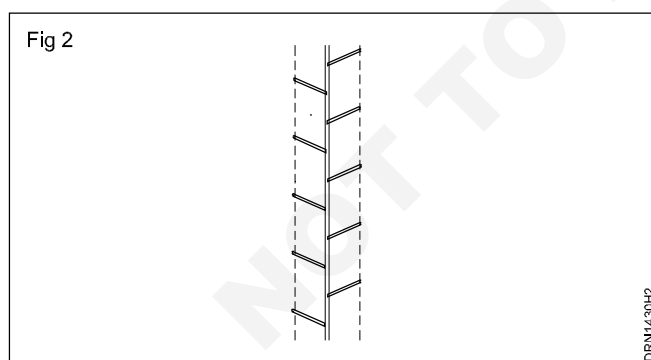
TASK 1 : Darn a hear and a hole

Straight cut/tear: Study the weave of the fabric and the cut position carefully.

- 1 Mark lines all around the cut keeping equal distance (appr.0.5 cm - 1 cm) on all sides. Use marks as a guidance for darning. (Fig 1)



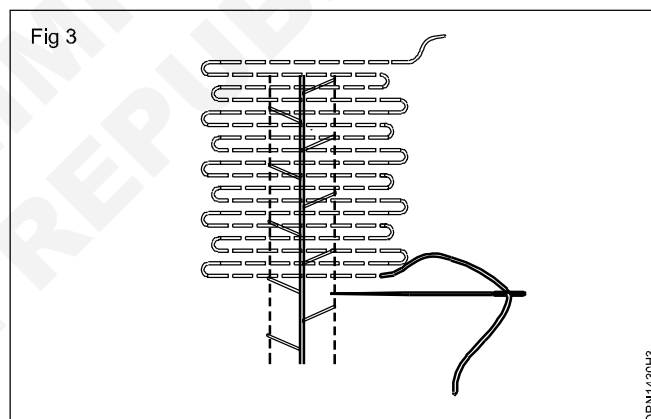
- 2 Draw both edges of the cut together with open fish bone stitch. (Fig 2)



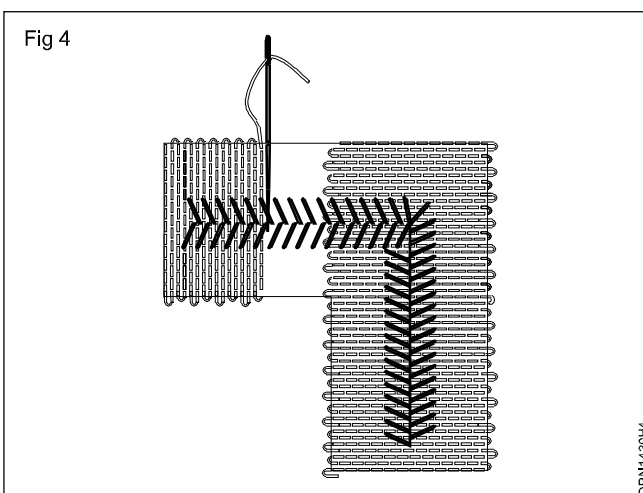
- 3 On the wrong side, start to darn on marks rectangular to the cut.
- 4 Use the darning needle and if possible use thread from same fabric. Draw threads from the underside of the garment (hem or facing etc).

For best results, use warp thread if you darn in warp direction and weft thread if you darn in weft direction.

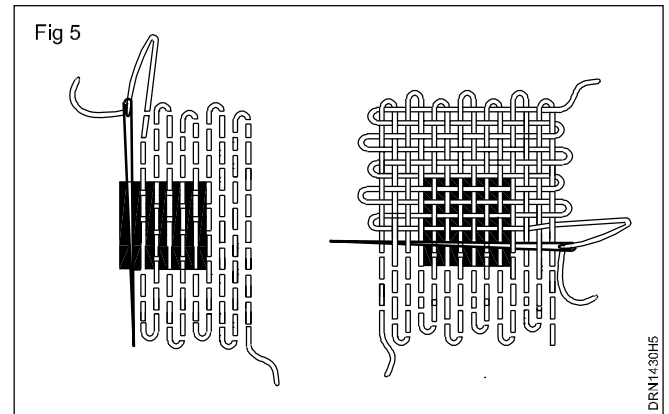
- 5 Darn according to the weave of the fabric (one thread up and one thread down). Leave loops at the end of the row of stitches, longer loops at each alternate row of the stitches for shrinking. (Fig 3)



- 6 **Triangular cut:** Follow the same method of straight cut. Start working on weft way first, then weave in warp direction through the previous stitches. (Fig 4) At the corner the stitches will overlap.



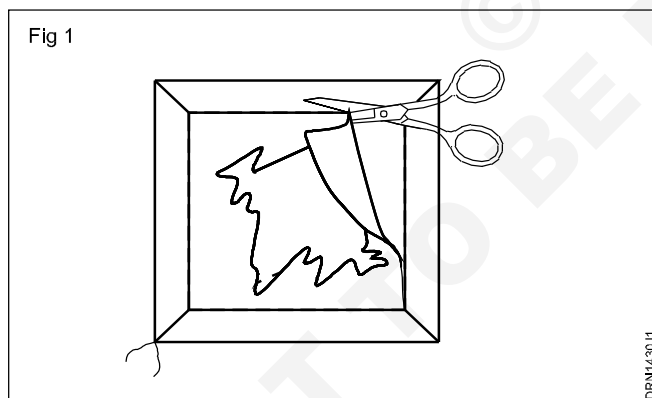
Darning of a hole: First trim the edges of a hole so that a rectangular shape is visible. Trim also the worn-out places around the hole. The darning should extend the hole on all sides by several stitches. Now weave with alternating stitches. (Fig 5)



TASK 2 : Stitch a plain patch, a hemmed patch and a decorative patch

- 1 Select a patch first. A patch should be of the same material as the garment.
- 2 If the fabric is figured, cut the patch to match the designs. If the material is to be durable, it should be of the same weight and texture as the garment.
- 3 Always cut a patch on the straight of the fabric and match the grain of the patch to the grains of the garment.

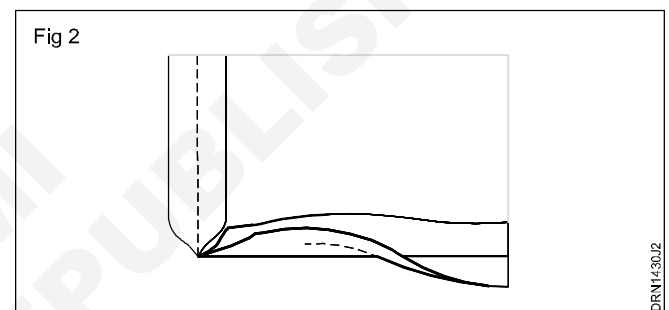
Plain patch: Independent of the shape of the hole, the patch has to be square or rectangular. Baste with rectangular or square shape around the worn-out place or hole. Trim the edges around the hole matching the shape of basting and leaving 1 cm inside from basting. Clip 1 cm diagonal cuts at each corner. (Fig 1)



- 1 Fold back the edges (seam allowance) to the wrong side of the garment. Press flat and be careful not to stretch the edges.
- 2 Place the cut out part on the patch fabric, mark the outlines. Add 1 cm seam allowance all around, mark again and cut on the outer lines. Baste on the inner rectangular shape.
- 3 Place the patch in position with right sides of the fabric together. Keep the hole in the middle matching the basting lines on the garment and on the patch.

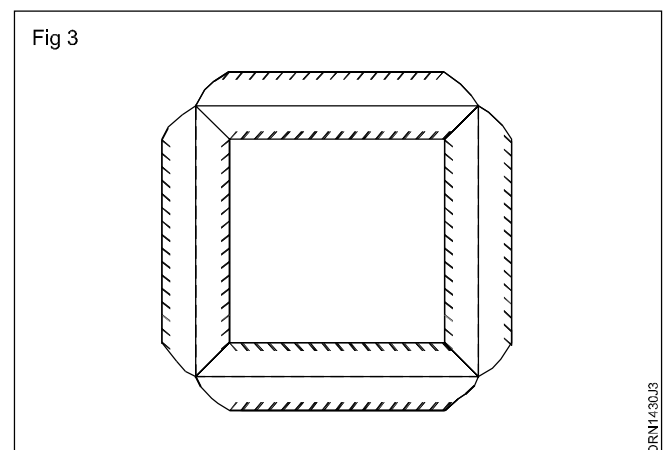
Don't forget to match the grain lines and design of the fabric.

- 4 Fix the patch first with basting stitches on the previous basting lines. Then stitch with back or with machine stitches close to the basting lines. (Fig 2)



Take care to tuck the clipped corners carefully.

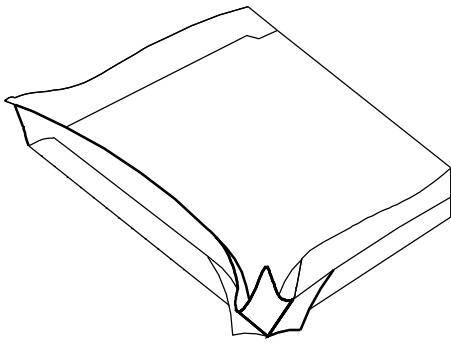
- 5 Press open the seam allowances and trim off the corners. Finish the seam allowance with overcasting and remove basting. (Fig 3)



Hemmed patch: Apply the same procedure as for plain patch but add bigger seam allowance to the patch piece, i.e. add 1.5 cm instead of 1 cm.

- 1 Attach patch in the same way. Trim the corners of the garment seam allowance. (Fig 4)
- 2 Press both seam allowances flat on the garment. Turn the patch seam allowance by 0.5 cm to the underside.

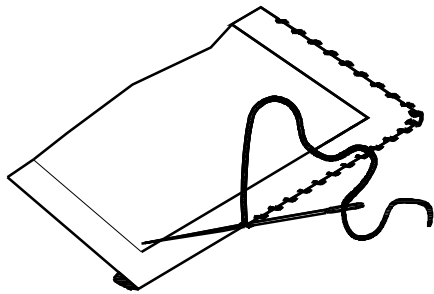
Fig 4



DRN1430J4

Baste it to the garment, then hem it with slip stitch. Remove basting. (Fig 5)

Fig 5

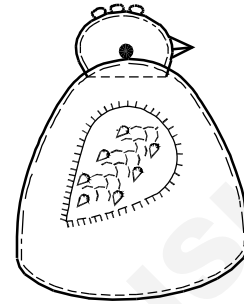


DRN1430J5

Decorative patch: Decorative patches are attached on the right side of the garment.

- 1 Select a colour contrasting with dress fabric. Draw a design on a paper. The shape of the design should cover the damaged portion in the dress properly. Pin the paper on the patch fabric for cutting the patch. Cut through both, paper and fabric together on the drawn shape.
- 2 Baste patch in place. Set running stitches on the outer edges of patch. Finish with close button hole stitches covering the running stitches. (Fig 6)

Fig 6



DRN1430J6

Trim the edges of the garment at the damaged portion from underside. Leave 1 cm seam allowance, finish it with overcasting.

Decorate the patch with embroidery stitches.



Scan the QR Code to view
the video for this exercise

Stitching of ladies suit

Objectives: At the end of this exercise you shall be able to

- **stitch a belted salwar**
- **make bottom cuff with stiffening and decorative finish.**

Style Features	Materials and Trimmings
<ul style="list-style-type: none">• Gathered front and back• Decorated bottom finish	<ul style="list-style-type: none">• Cut components of Salwar• Canvas 0.05 x 0.90m• Matching colour thread• Machine needle no.16



Job Sequence

The cut components of salwar are the following

Side Panel 4

Centre panel 2

Belt 2

- Join straight sides of side panels with centre panel, for both leg parts.
- Make bottom cuff with stiffening.
- Make ease stitches, 1 cm below upper edge of stitched leg pieces.
- Match centre front and centre back of leg piece and belt.
- Adjust the width of the leg piece with belt piece by gathering the fabric between the marks.

First gather, then pin belt to leg piece and set additional gathers for adjustment in the same operation.

- Stitch with double seam.
- Repeat the process for other leg.
- Stitch inside leg lengths.
- Join crotch by double seam.
- Cut excess material from bottom seam allowance.
- Finish by making fold-down casing at top of belt.
- Prepare a tying string of 1-1.5 cm width from balance material. Length of string must be at least 15 cm longer than belt girth.
- Press the garment.

Skill sequence

Bottom finish

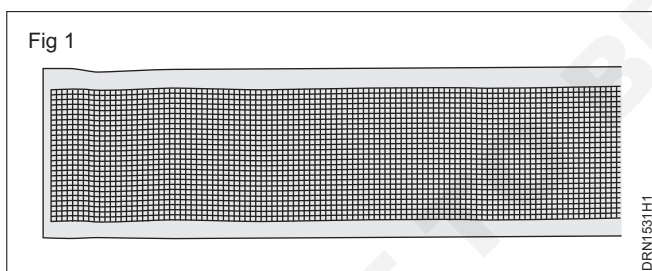
Objectives: This shall help you to

- **make decorative bottom cuff with stiffening.**

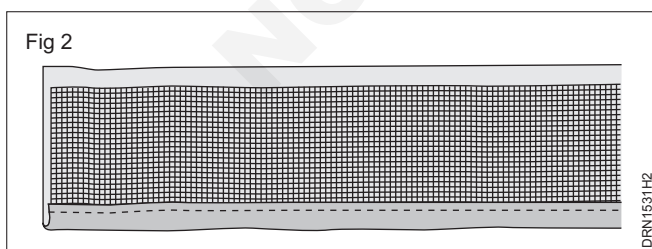
Cut two strips of canvas/stiffening material (size: width of bottom + 5 cm for shape and seam; 5 cm length.)

Cut 2 pieces of cloth from remaining fabric (width is same as canvas, length is 7 cm).

Place canvas piece over a strip of cloth on wrong side at a distance of 1 cm from each long edge. (Fig 1)

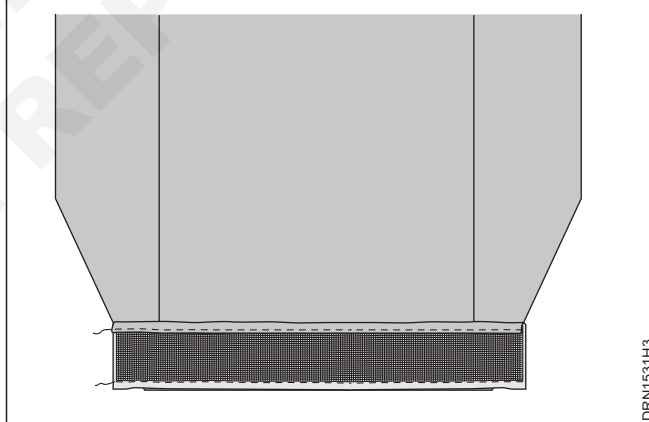


Turn 1 cm cloth over canvas strip and stitch 5 mm from edge. (Fig 2)



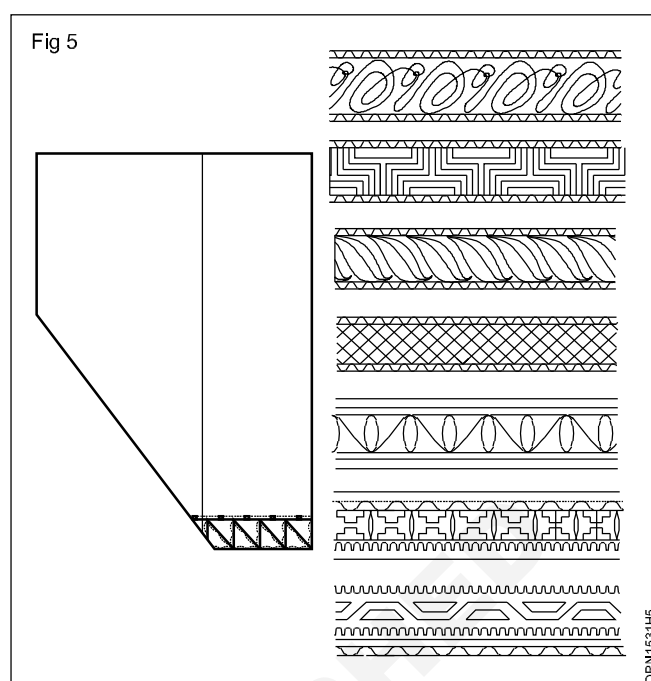
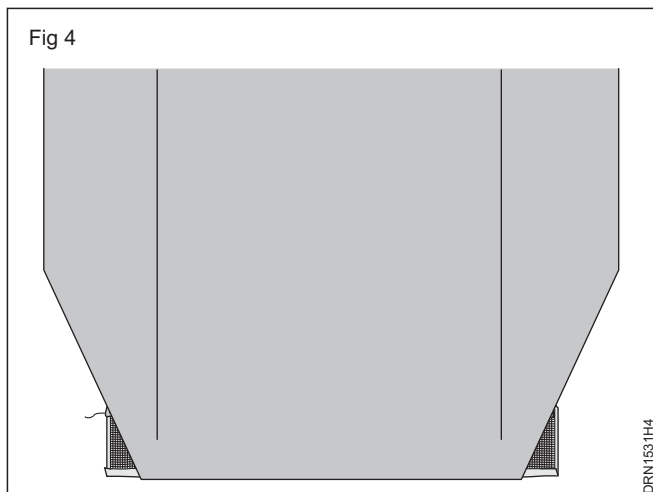
Place bottom strip over bottom of leg panel, with right sides together and stitch. (Fig 3)

Fig 3



Now turn bottom strip towards underside (wrong side of panel will match with wrong side of strip now) and stitch from right side at upper edge of bottom strip. (Fig 4)

Decorate bottom with different decorative stitches with fashion maker machine or draw design on the cuff and stitch it with treadle machine. (Fig 5)



Draft and cut a churidar

Objectives: At the end of this exercise you shall be able to

- calculate the material required for a churidar
- draft and cut the churidar paper pattern and master pattern.
- prepare the bias bag for layout and cut the required components.

Measurements (Medium size)	Materials and Trimmings
<ul style="list-style-type: none"> • Full length (Waist to ankle) = 105 cm • Churi = 15 cm • Hip = 100 cm • Round knee = 41 cm • Round calf = 38 cm • Round bottom (ankle) = 30 cm 	<ul style="list-style-type: none"> • 2.00 x 0.90 m Poplin/Terycot • 2 Brown sheet

Paper Pattern Drafting

- Lay the brown sheet widthwise folded on the cutting table with its wrong side facing.

If required, attach excess brown sheet lengthwise to suit the length of churidar.

- Draw the drafting of churidar for the given measurements with the help of the instructions for drafting (Fig 1).
- Draw smooth curve joining the points 6 - 14 - 9 - 10 - 11 - 12 for perfect fitting.

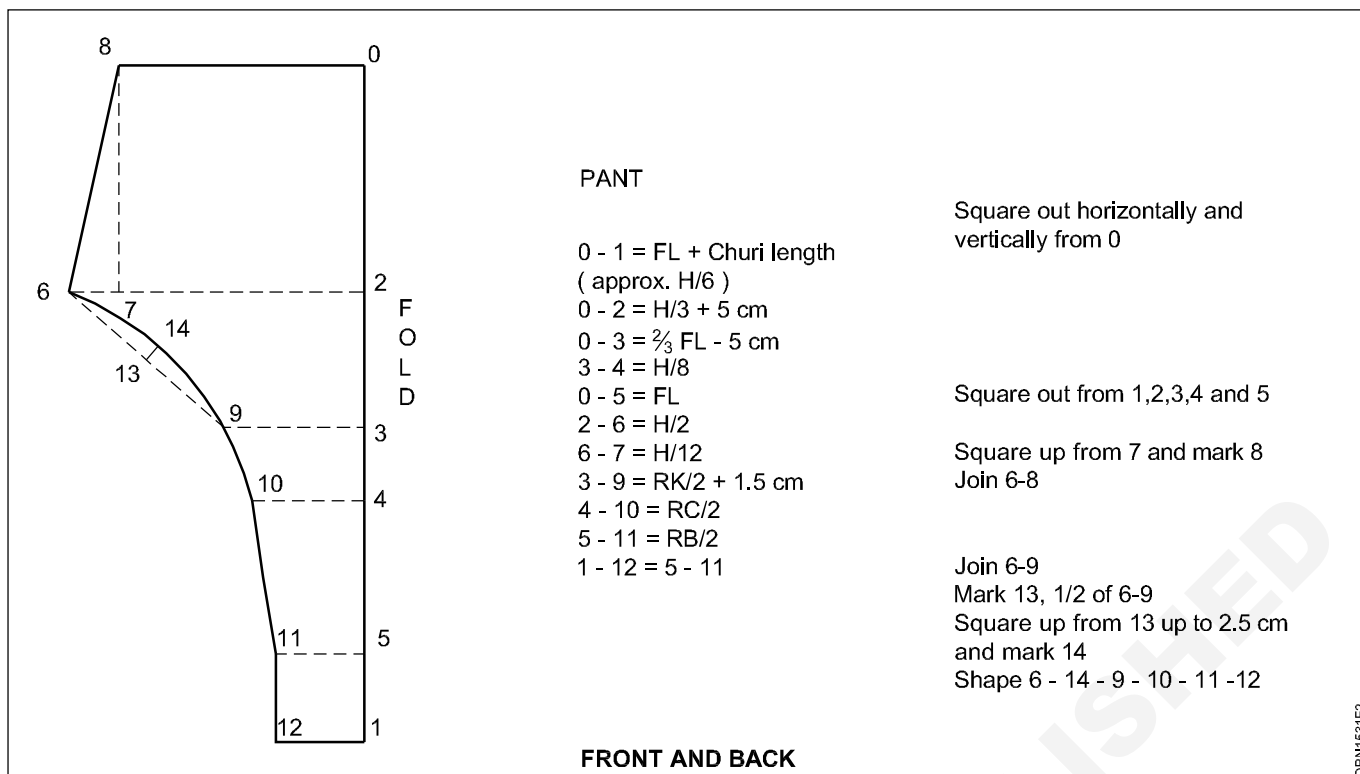
Paper Pattern Cutting

- Cut the prepared paper pattern along the following cutting lines, leaving enough space around them.

Front and Back → 0 - 8 - 6 - 14 - 9 - 10 - 11 - 12 - 1

Master Pattern

- Lay a brown sheet and draft the master pattern from the cut paper pattern.
- Add the allowances as mentioned in the instructions for master pattern to the cut paper pattern components for seam allowances, turnings, openings etc.



INSTRUCTIONS FOR MASTER PATTERN

Crotch line	1.5 cm
Inside leg seam	2 cm
Fold-down casing on waist	5 cm
Bottom for hem	2 cm

Balance marks on knee line (9)
calf line (10)
bottom line (11)

- Balance marks on knee line (9), calf line (10), bottom line (11)
- Cut the excess brown sheet to get the master pattern of churidar.
- Name the cut master pattern components with its descriptions for future reference.

Layout and Cutting

- Use the given measurement and estimate the material required by following the formula for calculation (width of cloth = 0.90 m).

Material required

$$= \frac{\text{Length of bag} \times \text{width of bag}}{\text{Half width of cloth}}$$

Length of bag = Full length + bottom turning + casing turning + churi

Width of bag = Half hip + half knee round + two seam allowances

Cloth required =

- Prepare the bias bag and layout the component mark and cut the cloth (SS No. 1)
- Fold and tie the cut components together, which are ready for stitching.

Bias bag

Objectives: This shall help you to

- prepare the bias bag, to layout, mark and cut the cloth.

1,2,3,4 is the material for bag. 1 - 2 is the width and 1-4 is the length of cloth. (Fig 1)

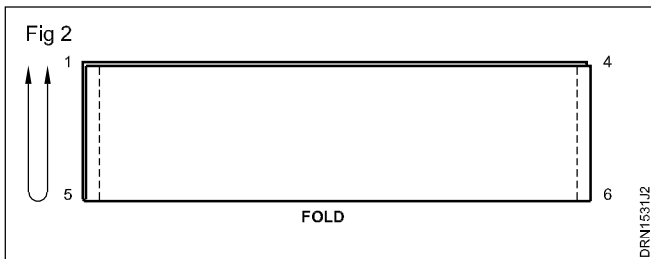
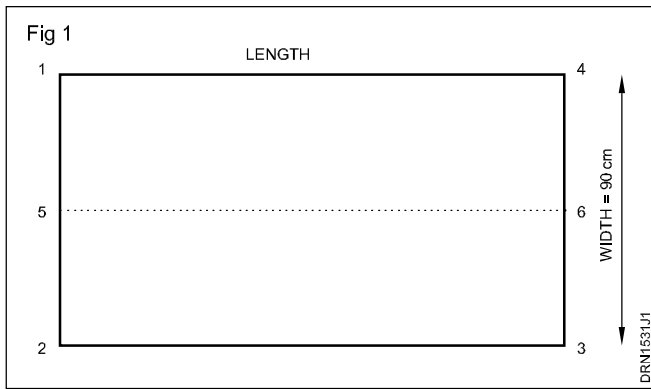
Fold the material from center in length i.e. at point 5 - 6.

By this we get the size 1,4, 6,5 (Fig 2)

Stitch at 1 to 5 and 4 to 6, allowing 1 cm seam allowance by double stitching.

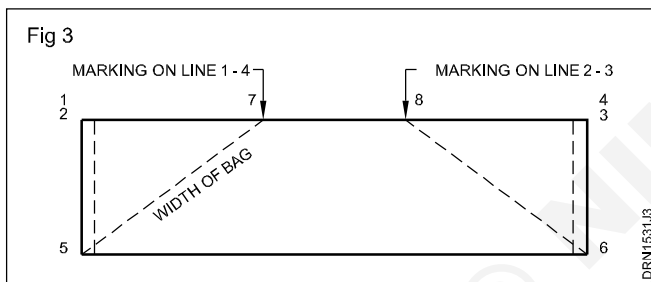
To adjust the width of bag, take

$$\frac{H}{2} + \frac{RB}{2} + 2 \text{ cm}$$



On line 1 - 4 measure from 5 and mark 7.

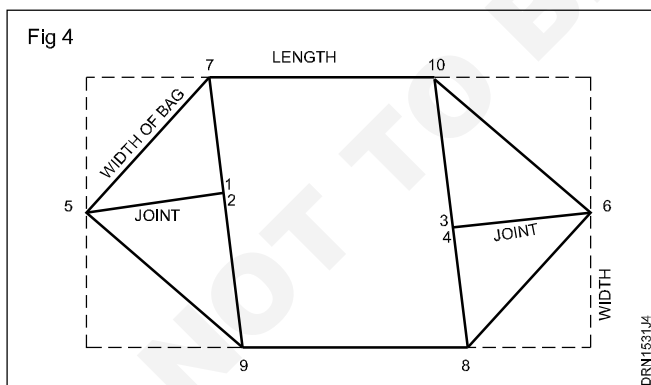
$5 - 7 = \text{width of bag (Fig 3)}$



On line 2 - 3 measure from 6 and mark 8.

$6 - 8 = 5 - 7 = \text{width of bag}$

Fold the piece at 7 and 8. (Fig 4)



After that procedure open edges are on 7-9-8-10. Start stitching from 10.

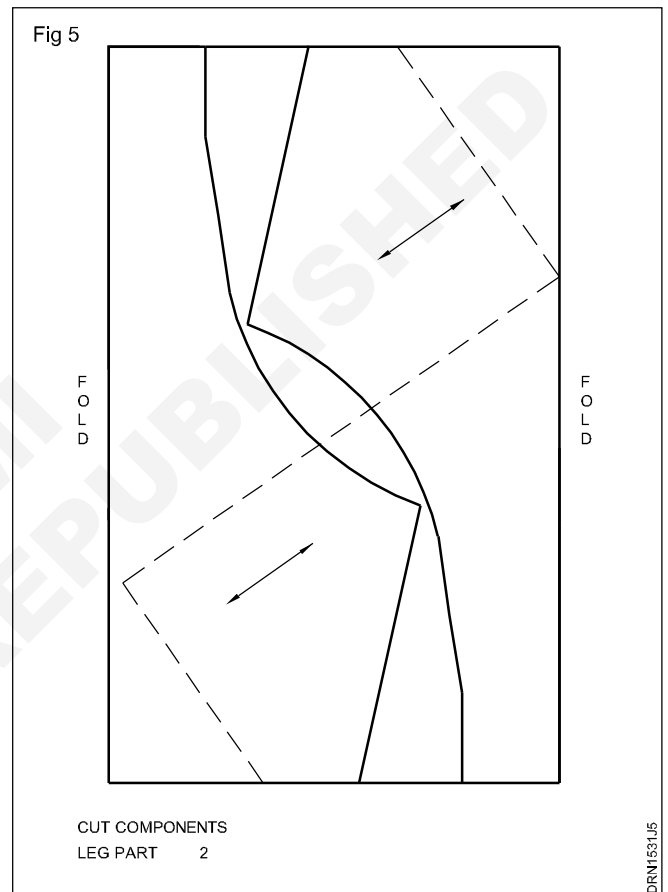
Join 10-8-9 with 10-7-9 (stitching along the selvage)
Make a cut at 5 and open up to 7, i.e. on width of bag.
Repeat for other end of width (6-8). Now you have prepared a cylinder.

Fold the brown paper lengthwise, cut along the outer lines of draft, so you get two copies of the pattern for layout.
Mark notches for fold-down casing, bottom hem and seam allowance. Roll the cylinder and lay the pattern on bias bag

in such a way that the maximum joints are placed above knee, ie. on upper side.

To find the right placement of the cylinder you have to try: roll the cylinder and place the pattern. If the placement still is not proper try once more.

After finding the right position of cylinder make the cylinder flat, take care that no wrinkles are there. The paper pattern has to be placed in opposite direction the straight part of the bag. The pattern has to be placed at the long folded side of the bias bag. (Fig 5)



The next two graphics show another type of layout which can be used only on bigger width: the material required is 2.00 x 1.00 m.

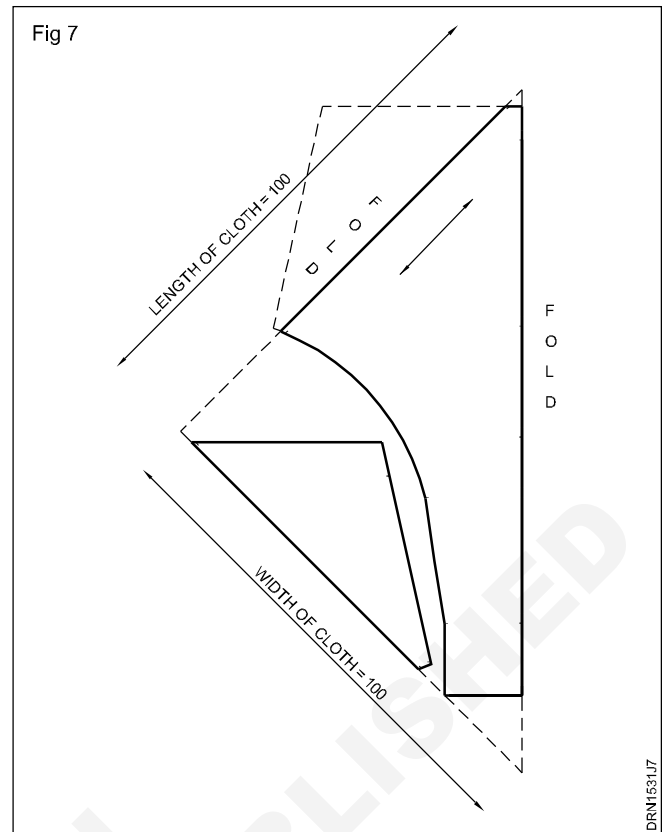
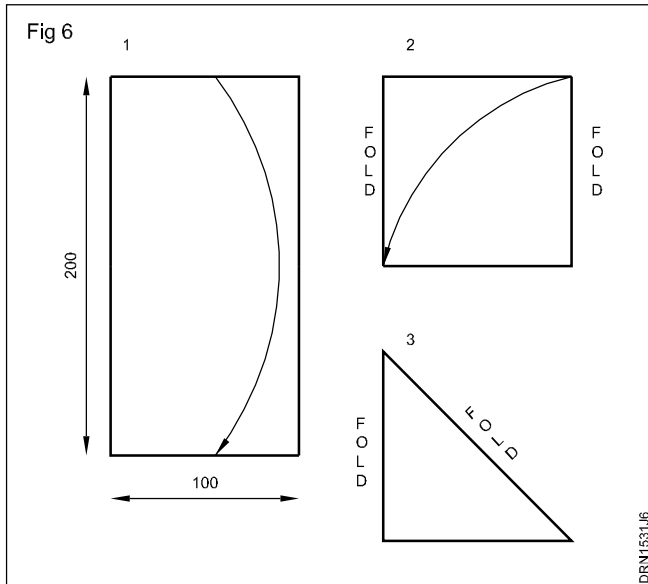
The advantage of this layout is: there are no joints in leg pieces, so it is more comfortable to wear. Leg seams also keep in position, even after several washings.

Fold the fabric twice. (Fig 6)

Layout as shown. (Fig 7)

While stitching the triangular leg pieces take care to join them selvages together and widths together.

To reduce the bulk of material on waistline, the churidhar can also be stitched with belt, similar as in Salwar.



Sew a churidar

Objectives: At the end of this exercise you shall be able to

- stitch and finish the inside leg with taped seam
- stitch a churidar.

Style Features	Materials and Trimmings
<ul style="list-style-type: none"> • Bias Cutting • Gathers (Churi) at bottom • Taped seam at inside leg finish 	<ul style="list-style-type: none"> • Cut components of Churidar • 2mt tape (width 1.5 • 4 hooks • Matching colour sewing thread • Machine needle no: 16 • Hand needle

- The cut components of churidar are the following.

Front and back leg part 2

- Stitch the inside leg length with taped seam, giving 1cm seam allowance (SS No.1)
- Turn bottom with narrow hem.

- Join crotch by double seam.
- Prepare fold-down casing .
- Finish and press.



DRN1531E3

Taped seam

Objectives: This shall help you to

- **stitch and finish inside leg length with taped seam.**

Stitch the inside leg with a plain seam 1.5cm with right sides of fabric together joining the front and back parts. (Fig 1)

Take the tape of 1.5cm width and fold it on its .

Can also use the fabric selvedge instead of tape

Place the fold tape exactly on the previous seam line, then stitch a straight seam on the line. (Fig 2)

Cut the excess length of the tape and trim seam allowance.

While stitching do not stretch the material.

Fig 1

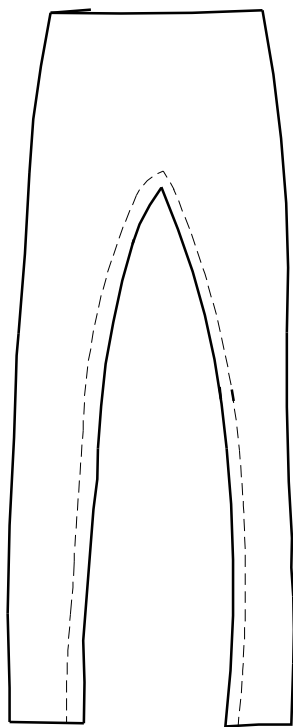
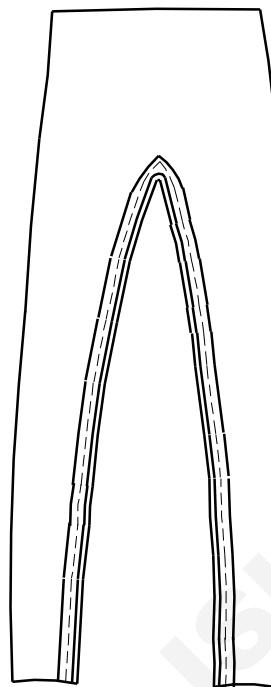


Fig 2



Draft and cut a kameez

Objectives: At the end of this exercise you shall be able to

- draft and cut the kameez paper pattern
- prepare master pattern
- lay and cut the required components of kameez.

Measurements	Material
Full length = 105 cm Natural waist = 39 cm Bust level = 25.5 cm Shoulder = 38 cm Bust = 92 cm Waist = 72 cm Hip = 100 cm Sleeve length = 25 cm	2.60 x 0.90 m Poplin/Terycot 1 Brown sheet

Paper pattern drafting

- Lay a brown sheet vertically along the length of the drafting table.
- Fold the brown sheet widthwise into equal halves so that its wrong sides facing upwards.
- Draft the kameez front, back and sleeves pattern following the instructions for drafting.

Draft the pattern, to match the marking 0-1 with the folded edge of the brown sheet

Pattern Cutting

- Cut the prepared paper pattern of Kameez bodice and sleeves leaving enough space around for drafting the master pattern.

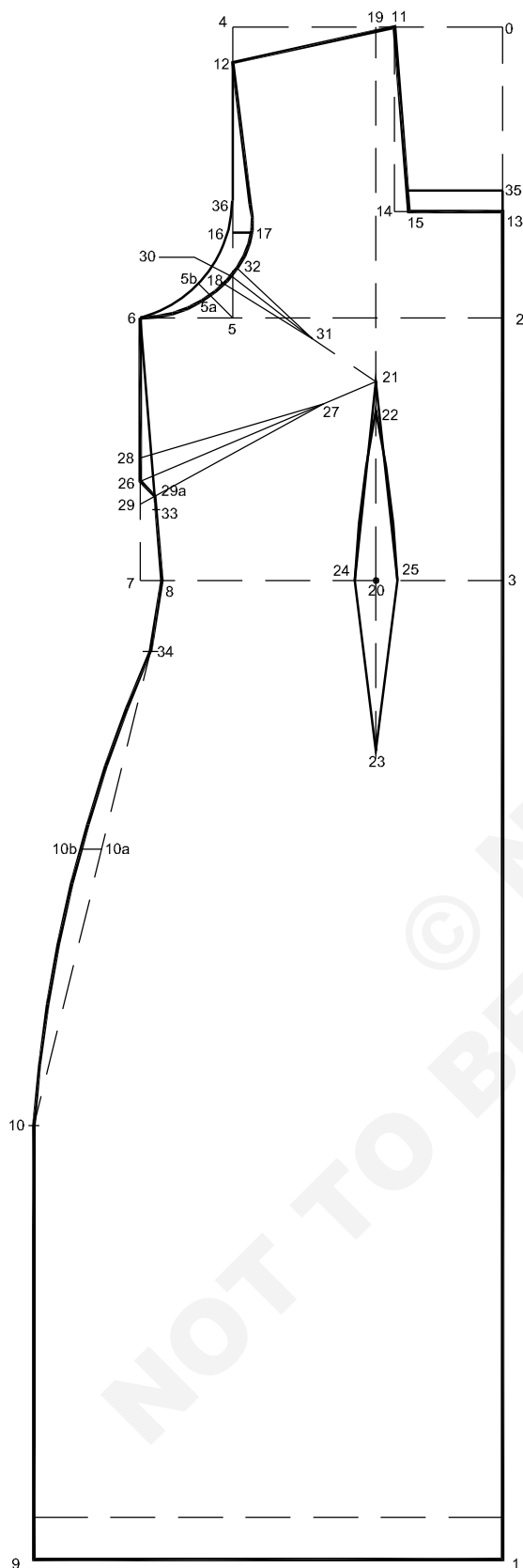
- Cut the pattern along the following cutting lines

Bodies Front → 13 - 15- 11- 12 - 17 - 32 - 18 - 5a - 6 - 28 - 26 - 29a - 33 - 8 - 34 - 10b - 10 - 9 - 1 - 13

Bodice Back → 35 - 35a - 11 - 12 - 36 - 5b - 6 - 8 - 34 - 10b - 10d - 9

Sleeve → 0 - 17 - 14 - 13 - 12 - 4 - 7 - 5

(Front Shape) → 0 - 21 - 18 - 16 - 4



FRONT & BACK

Front

0-1 = FL + 3 cm (for dart)

0-2 = B/4 - 2.5 cm

0-3 = NW

0-4 = Sh/2

2-6 = B/4 + 2.5 cm

7-8 = 1.5 cm

1-9 = B/4 + 10 cm

9-10 = B/3

10-10a = 1/2 of 8-10

10a-10b = 1 cm

0-11 = B/12

4-12 = B/36

0-13 = B/8 + 1.5 cm

14-15 = 1 cm

5-16 = 1/3 of 12-5

16-17 = 1.25 cm

5-5a = 1/3 of 6-5

5-18 = 2 cm

0-19 = 3-20 = B/12

+ 1.25 cm

19-21 = BL

21-22 = 2 cm

20-23 = 20-22

20-24 = 20-25 = 1.5 cm

6-26 = B/8

21-27 = 4 cm

26-28 = 26-29 = 1.5 cm

18-30 = 0.75 cm

30-31 = B/12 - 1 cm

30-32 = 0.75 cm

8-33 = 8-34 = B/12

Square out horizontally and vertically from 0

Square out from 2, 3 and 1

Square down from 4 & mark 5

Square down from 6, mark 7

Join 6-8

Square up from 9

Join 10-8

Shape 8-10b-10

Join 11-12 and square out from 13

Square down from 11 and mark 14

Join 11-15

Square out from 16

Join 12-17

Divide angle 16-5-6

Shape 12-17-5a-6

Join 19-20

Square up and down from 20

Shape slightly 22-24 and 22-25

Join 24-23 and 25-23

Join 26-21

Join 26-27

Join 28-27, 27-29 and mark 29a, join 26-29a

Join 30-21

Join 31-32 and 31-18 and extend up to shape of armhole Mark for placket opening

Back

1-1a=9-9a=3cm

0-35 = B/8

12-36 = 1/2 of 12-5

5-5b = 1/2 of 5-6

Addition of 3 cm in full length is given for side dart. It is not required for back length. Take only full length for back.

Outlines are same as front Square out from 35 upto previous neck line

Divide angle 36-5-6

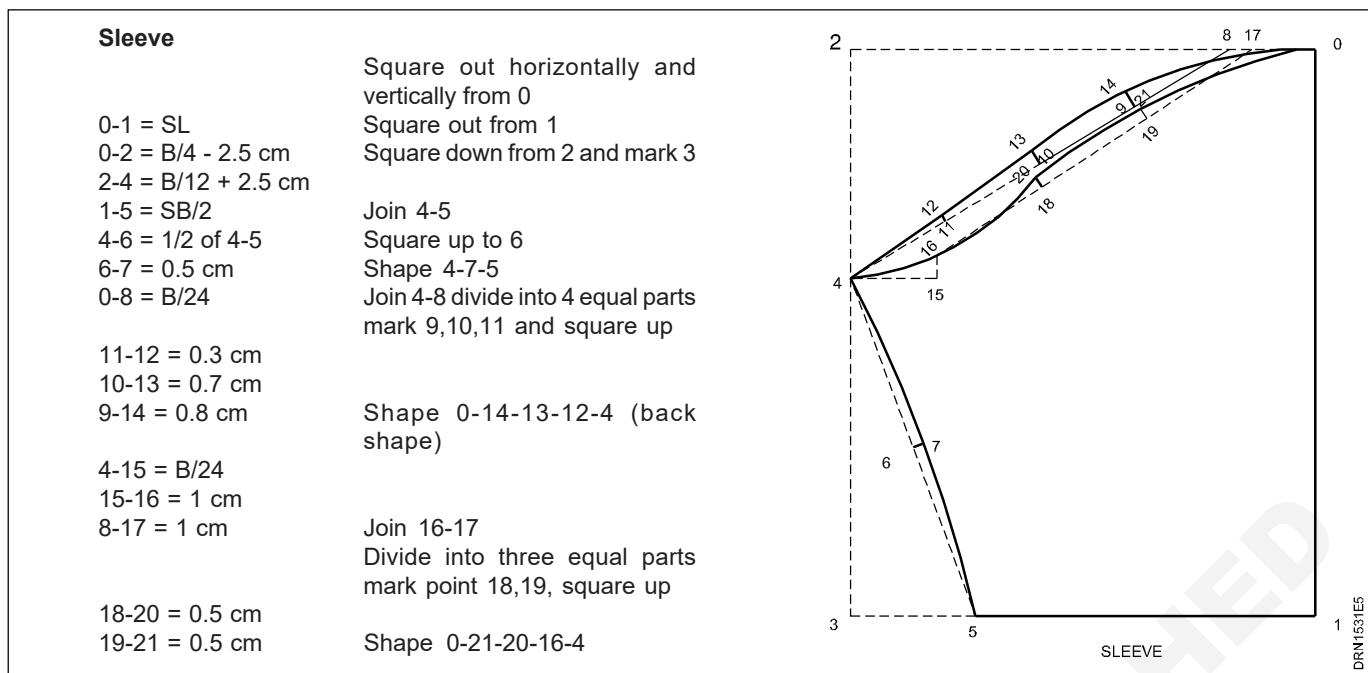
Shape 12-36-5b-6 (back arm hole)

For centre dart at back:

Join 21-20

Join 21-24, 21-25, 25-23, 24-23 (back dart)

Scye dart and side dart are not required.



Master Pattern

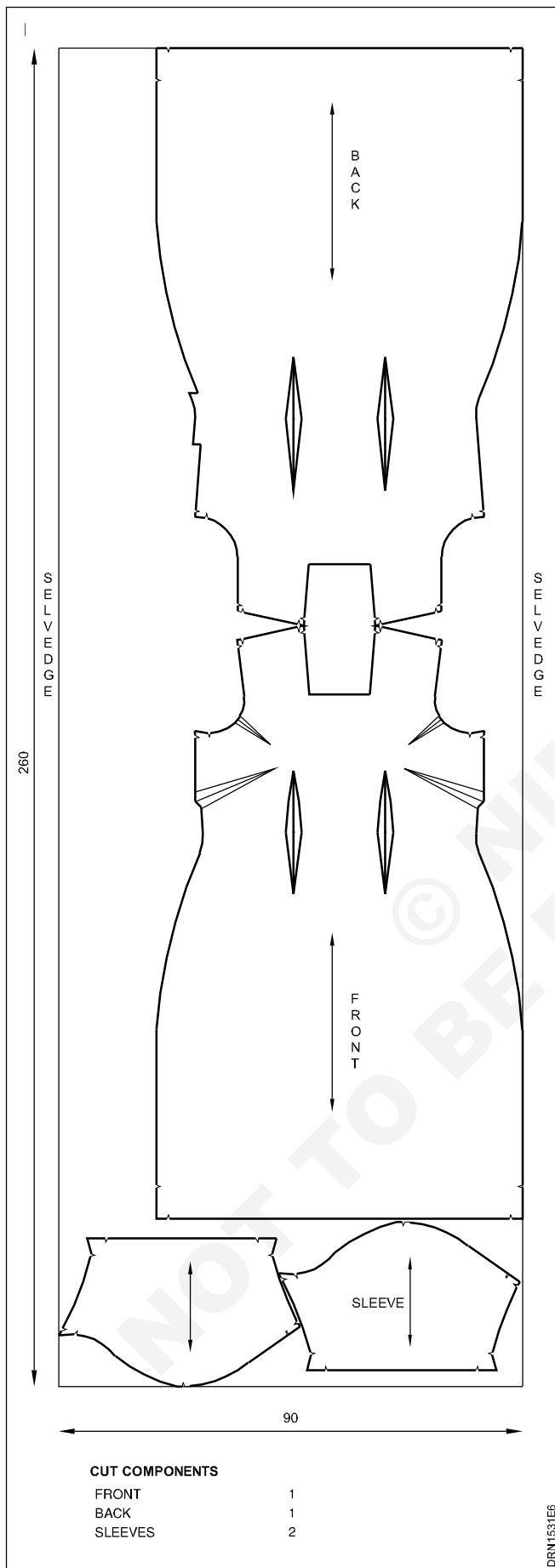
Add the given allowance to the cut paper pattern for seam allowance, turnings, hems, etc.

Instruction for Master Pattern		Sleeve	
Front and back		Top	0.75 cm
Neck, shoulder and armhole	0.75 cm	Side	2.5 cm
Sides	2.5 cm	Turning	3 cm
Bottom turning	6 cm		
Placket portion at back side on left hand	4 cm		

- Draw and cut the master pattern after marking the required allowances to the bodice and sleeve pattern.
- Cut notches at required markings.
- Name all the cut pattern of the kameez for future reference.
- Mark the outline of all the components of kameez as arranged using a tailor's chalk
- Remove the master pattern. Cut the fabric components as marked using a sharp pointed scissors.
- Cut notches at dart markings to set their positions.
- Fold and tie all the cut fabric components of kameez together.

Layout and Cutting

- Lay the Kameez fabric open on the cutting table with its wrong side facing.
- Spread and arrange the master pattern of kameez front and back part, sleeve economically on the fabric (Fig 3).



Sew a kameez

Objectives: At the end of this exercise you shall be able to

- stitch and finish neckline with facing
- stitch kameez with scye dart side darts and waist dart.



DRN1531E7

Style Features	Materials and Trimmings
<ul style="list-style-type: none"> • Front part with scye dart, side dart and waist dart • Back part with waist dart • Faced neck finish • Side Slit • Inseam placket at the waist seam 	<ul style="list-style-type: none"> • Cut components of kameez • 2 hooks • Matching colour sewing thread • Machine needle no.16 • Hand needle.

- The cut components of kameez are the following

Front bodice 1 Facing piece 1

Back bodice 1

Sleeves 2

- Baste and stitch darts, and press scye and side darts towards waistline and waist darts towards centre back and centre front.
- Finish the neck with facing. (SS.No.1)
- Stitch front and back side together, leaving slit opening on both sides and in seam placket mouth on left side on marks.

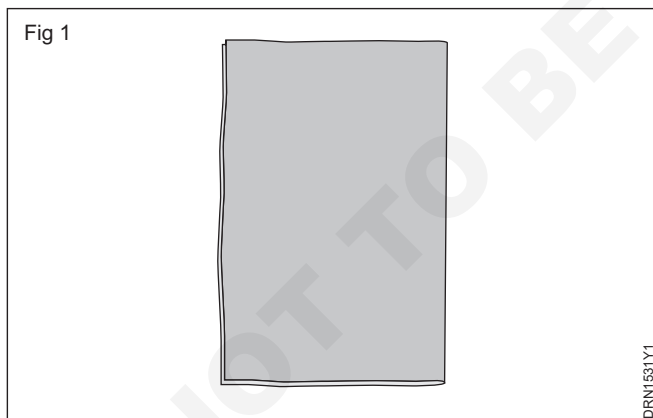
- Trim the edges of side seam with pinking scissor leaving placket opening.
- Prepare the inseam placket
- Press open the side seams.
- Finish the slit and bottom by hem.
- Finish the sleeve bottom by hem.
- Stitch the side seam of sleeve and trim the edges with pinking scissors.
- Set the sleeves in armhole (set-in-sleeve method).
- Fix 3 hooks and eyes on placket.
- Finish and press.

Neckline facing

Objectives: This shall help you to

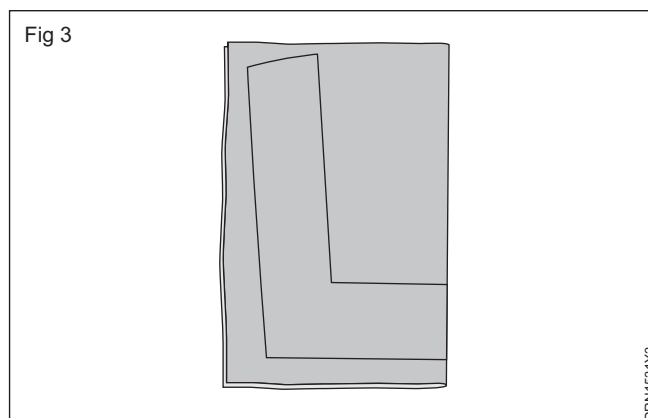
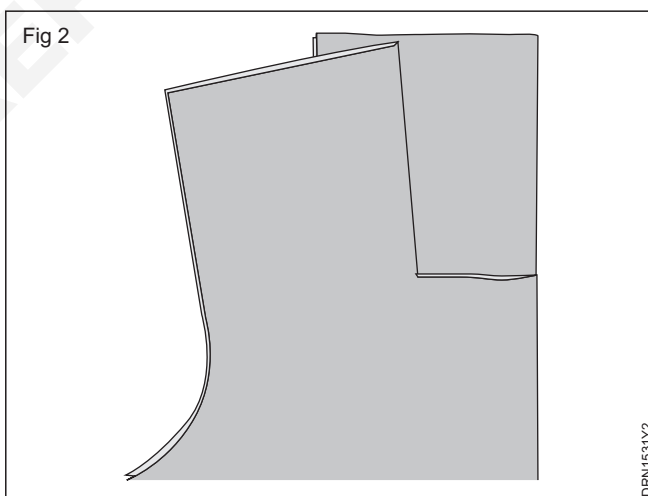
- to cut the facing and to attach it to the square neck.

Take two pieces of cloth (16 x 22 cm) from the same fabric as the kameez for facing. Use excess material from layout. Fold each facing piece in centre widthwise. Work with one piece first. (Fig 1)



Set the folded front neck of kameez upon one folded piece together with folded edges of both pieces. Mark the neck shape and the slope of shoulder line on the facing. (Fig 2)

Copy the neck shape on facing at a distance of 4.5 cm. (Fig 3)



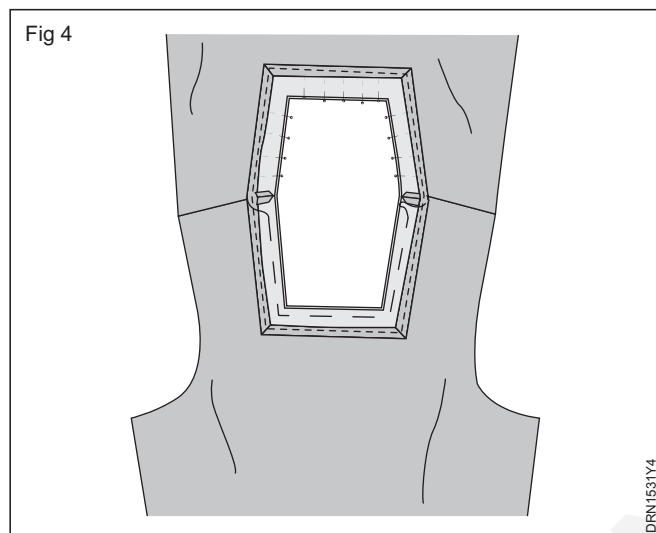
Cut on inner and outer shape and unfold the facing piece.

Repeat the whole process with back neck on other facing piece.

Stitch the shoulder seam of kameez and facing strip separately from the wrong side. Press open the shoulder seam of facing strip. Press the seam allowance of kameez towards back.

Turn the outer raw edges of facing strip by 1 cm towards wrong side and stitch at a distance of 0.5 cm.

Pin the facing strip congruently on the neck of shirt; join right side of kameez and facing strip. Take care that shoulder seams match. Baste it. (Fig 4)



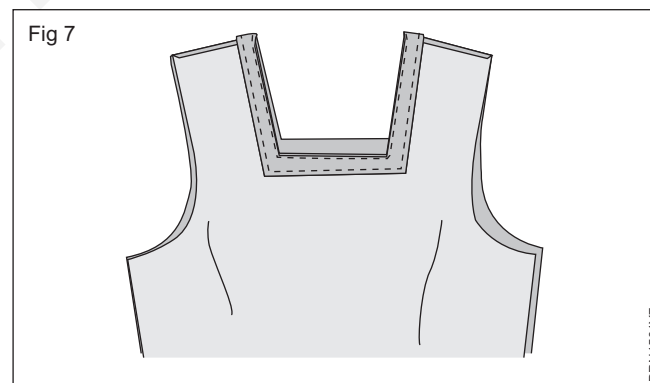
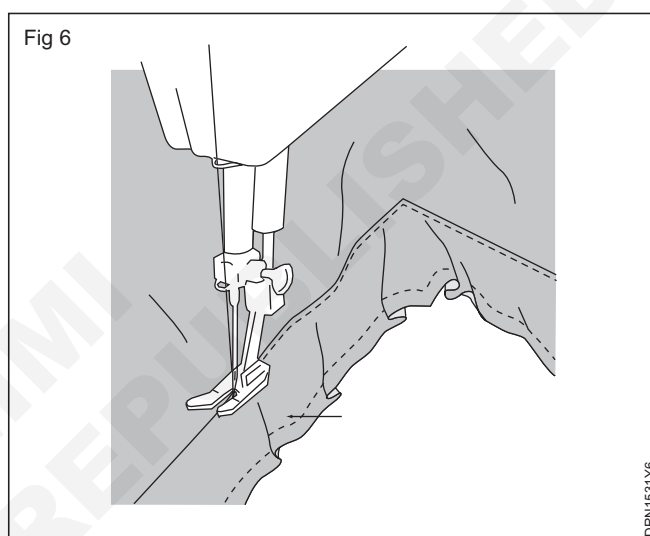
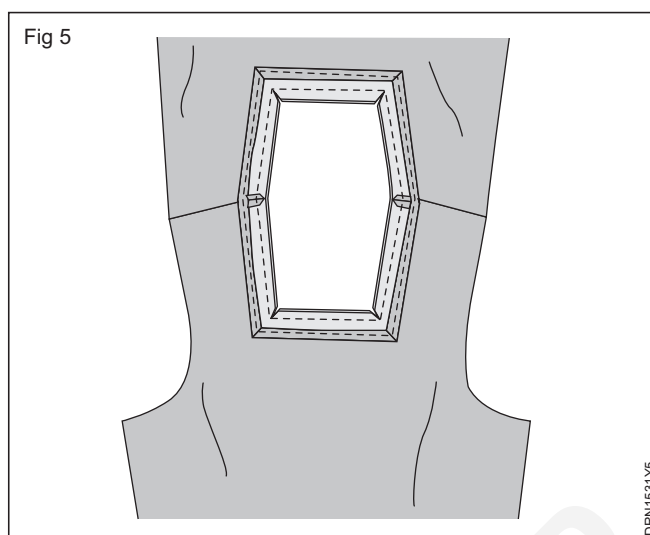
Stitch around the inner neckline at a distance of 0.75 cm.

Clip all the corners diagonally leaving 2 mm from seam edge. (Fig 5)

Fold the facing upwards inside the neck and top stitch all around very close to the edge of neck shape. (Fig 6)

Stitch only on facing and seam allowance, don't catch shirt material.

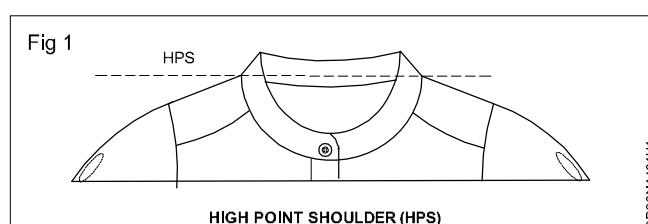
Fold the facing on the line on neck shape on the wrong side of shirt piece. Set the seam; press, baste and hem it. (Fig 7)



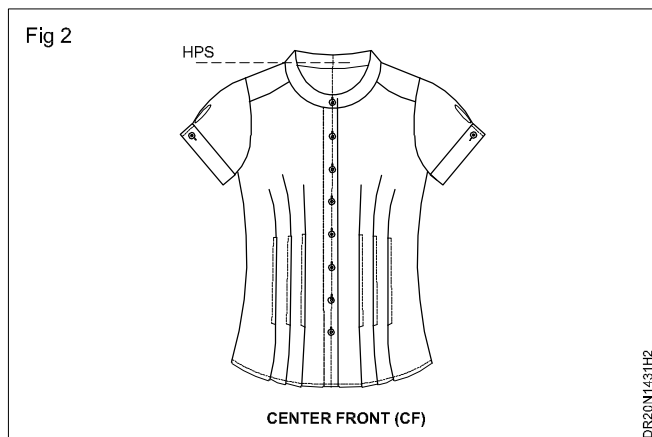
Spec Sheet

Objectives: At the end of this exercise you shall be able to

HPS : (High point shoulder) A main reference point located at the highest point of the shoulder , where the shoulder seam meets the neckline .many measurements are given in relation to the HPS. (Fig 1)



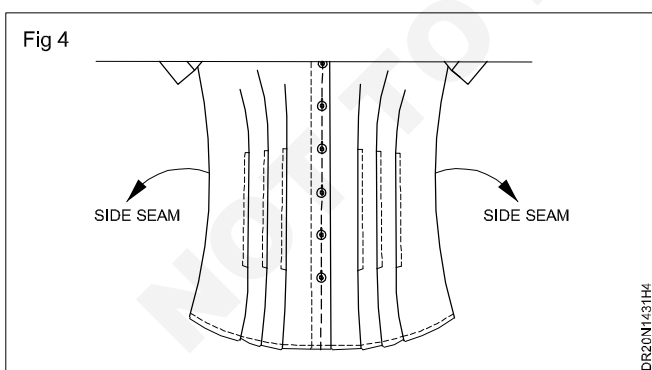
High point shoulder: Center Front (CF): Not to be confused with placket edges, the center front invisible line running vertically down the exact center of the front of a garment. (Fig 2)



Center Back (CB): An invisible line running vertically down the exact center of the back of a garment. (Fig 3)

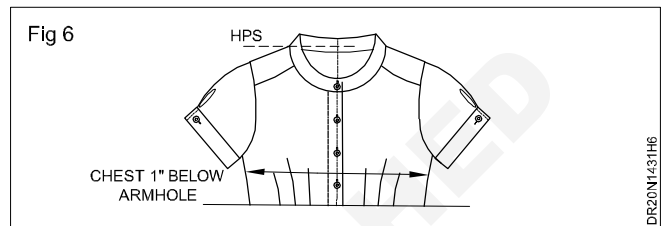
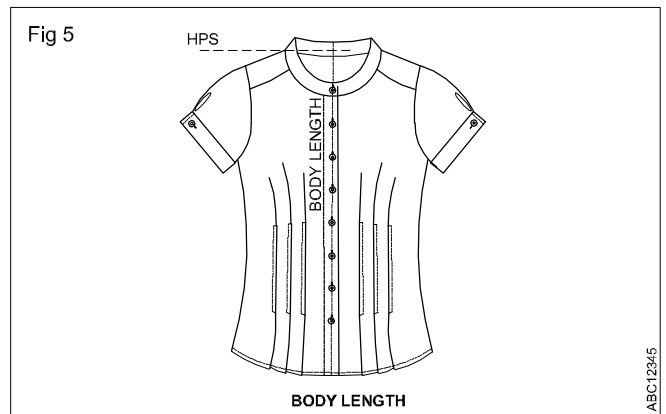


Side Seam (SS) : Seams on the left and right sides of a garment from the bottom of the armhole down to the bottom hem. (Fig 4)

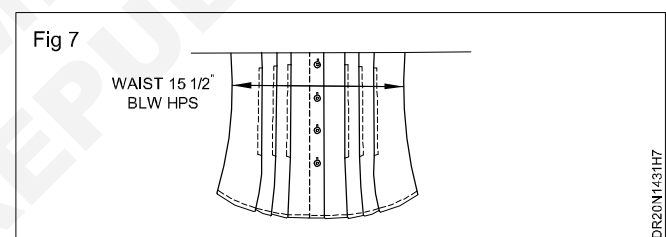


Body Length: Length of the garment from HPS to the Bottom Sweep. (Fig 5)

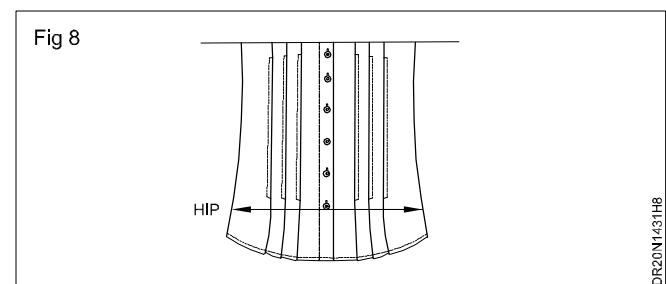
Across Chest: Usually measured 1 below armhole horizontally from edge to edge. (Fig 6)



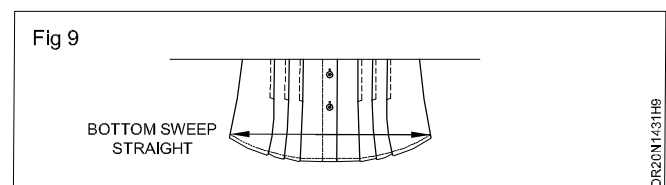
Waist: Measured horizontally from edge to edge at a specific distance below HPS, which will vary depending on sample size and company standards. Example: For a junior size 9 waist spec is taken from 15 1/2 below HPS. (Fig 7)



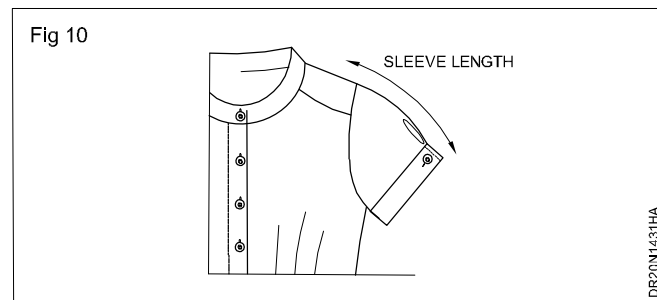
HIP: Measured horizontally from edge at specific distance below HPS, which will vary depending on sample size and company standards. Example: For a junior size 9 spec is taken from 24 below HPS. (Fig 8)



Bottom Sweep: The bottom edge of the garment measured horizontally straight across from edge to edge. (Fig 9)



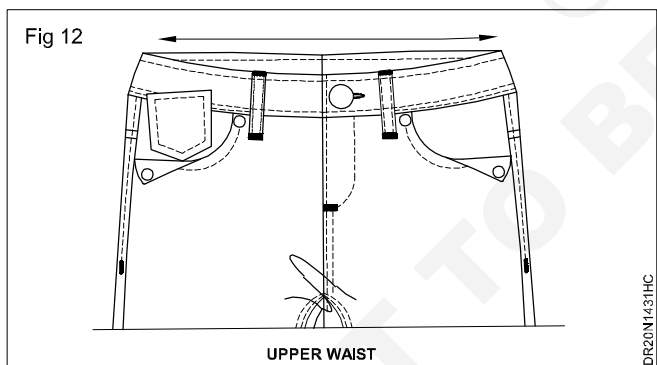
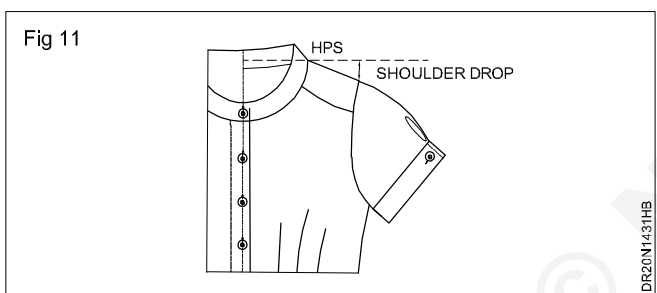
Sleeve Length: Distance from the top of the sleeve at the shoulder seam, to the sleeve opening. (Fig 10)



Bicep: Measured 1" below the armhole, perpendicular to the length of the sleeve.

Armhole (Curved): Measured along the curve of the armhole seam where the bottom armhole meets the side seam, to where the top of the armhole meets the shoulder seam.
Shoulder Drop: From HPS to the shoulder seam at armhole, (Fig 11)
Neck Opening: Measured from neck seam to neck at HPS

Upper Waist: Usually measured by aligning the front and back waistbands and measuring straight across the top of the waistband from edge to edge. (Fig 12)



Lower Hip: The lower hip sec is given through the 3-point method using three points of measure marked at a certain distance below the top waist at the sides and CF.

Thigh: Typically measured 1 below the crotch seam, perpendicular to the leg from side to side. (Fig 13)

Knee opening: Measured at a certain distance below the crotch seam perpendicular to the pant leg from side to side, Example: A junior size 9 knee opening is taken from 12 below the crotch.

Leg opening: Measured horizontally across the bottom edge of the leg opening. (Fig 14)

Fig 13

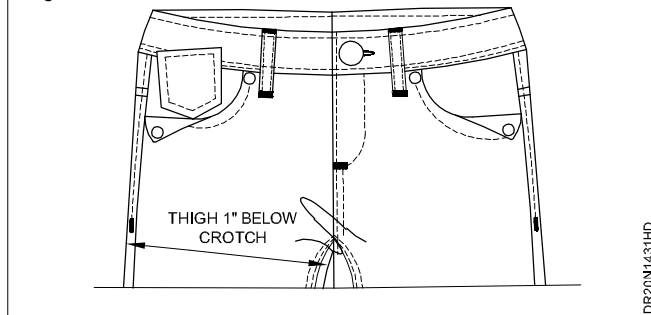
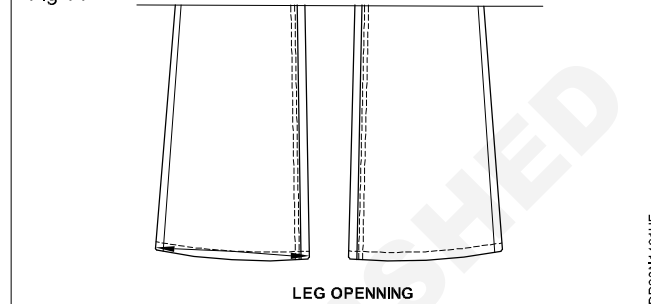


Fig 14



Front Rise: The center front seam from the crotch to the top of the front waistband.

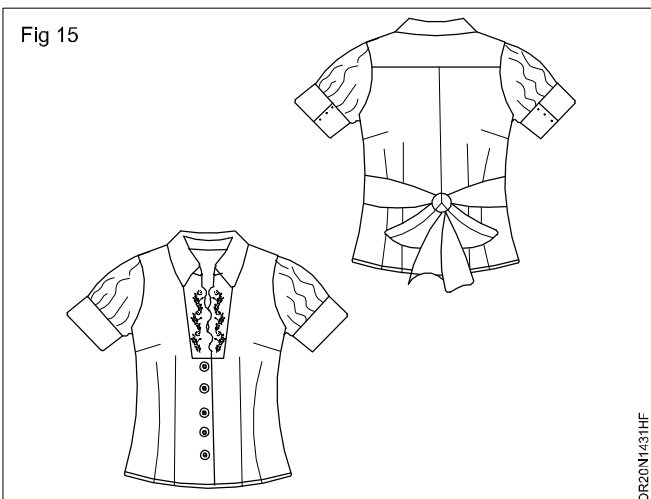
Back Rise: The center back seam from the crotch to the top of the back waistband.

Inseam: The inner leg seams the crotch seam to the leg opening.

Here is an example of specs that have been entered have been entered into a garment specification sheet (Spec sheet):

Important details not included in the spec list, should be detailed as callouts in the flat sketch, using arrows and detail sketches. Callouts should include any information that the pattern maker will need to create the pattern for the garment. Please note : Pattern makers use specs as a guide for the general size and fit of a finished garment. Actual pattern piece measurement will be different due to necessary adjustments needed to achieve proper fit and balance of a garment. (Fig 15)

Fig 15



Cost sheet

Objectives: **At the end of this exercise you shall be able to**
• **analyse the historical cost, estimate cost and components cost.**

TASK 1 : Analyse the historical cost and estimated cost

- 1 Historical sheet is prepared on basis of actual cost
- 2 Estimated cost sheet is prepare on the basic of estimated cost.

— — — — —

TASK 2 : Analyse the components of total cost

- 1 Prime cost (Prime cost= Direct material +
Direct wages = Direct expenses)

— — — — —

TASK 3 : Calculate prime cost from the following particulars for a production unit

Cost of material purchased	31,000
Opening stock of material	5,000
Closing stock of material	5,000
Wages paid	3,000
Rent of line of a special machine for production	6,000

Statement of prime cost

Details	Amount Rs.	Amount Rs.
Material consumed		
Opening stock of material	5,000	
Material purchased	31,000	
Material available for consumption	36,000	
Closing stock of material	4,000	
Material consumed		32,000
Cost labour : wages		3,000
Cost expenses : Rent of hire a special machine		6,000
		41,000

— — — — —

TASK 3 : Prepare Historical Cost Sheet
Prepare Historical Cost Sheet

Date:	25-Feb-15		
Style:	B2-411	Season:	A/W - 15
Size Range:	XS-XL	Classification:	Women's
Label:	Indian Outfitters	Group Name:	
Description:	Blazer with gold button metal closure		

Component Costs:	Yds/Qty	Unit Prc	S Amt
Fabric Costs:			
Velour	750	2650	2650
Lining	750	2650	2650
Interfacing	750	2140	2140
(Total Fabrics)			7440
Trims:	750	1.98	2
Gold Metal Button	750	0.15	0
Thread	750	0.05	0
Brand Label	750	0.15	0
Size Label	750	0.07	1
Theft Label	750	0.5	1
Care Content Label	750	0.5	1
Large Hang Tag	750	0.5	1
Small Hang Tag	750	0.5	1
Stretch Hang Tag	750	0.5	1
Price Hang Tag	750	0.5	1
(Total Trims)			
CMT/Labor Costs:			
Patterns	750	0.2	0
Marking	750	0.15	0
Grading	750	0.25	0
Sewing	750	10	10
(Total Labour)			
Packing Materials:			
Hanger	750	0.25	0.25
Polybag	750	0.02	0.02
Outer Box	750	0.075	0.075
(Total Packing)			
FOB:			
Duty	750	0.25	0.25
Air Freight	750	2	2
Customs Broker Fees	750	0.075	0.075
(Total FOB)			
Total Cost			
Whole Sale Price	100%	25.76	51.5
Whole Sale Margin			25.14
Retail Price	100%		108,42

TASK 4 : Analyse the types of accessories

Sl. No	Accessories
1	Inside collar card
2	Back support
3	Plastic butterfly
4	Tissue paper
5	Poly bags
6	Hang tag
7	Plastic bullets
8	Collar film
9	Pins
10	Clips
11	Hanger
12	Size Rings
13	Gum tapes
14	Carton Box

TASK 2 : Analyse the actual cost of accessories

Sl. No.	Accessories	Actual cost
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

TASK 3 : Analyse the estimated cost of accessories

Packing accessories Cost

Sl.No.	Description	Quality	Quantity	Approximate Range Price
1	Inside collar card	1" x 18" 1" x 20"	One	20 Paise each
2	Back support	12" x 18" 200 GSM	One	1.25 to 3.00 Rs
3	Plastic Butterfly	2 x 3" 1 x 2" 3 x 3"	100 Pcs	Rs. 30.00

4	Tissue Paper	One Ream	One 480 Sheets	20 Paise each Rs. 300
5	Polybags	PP (40 x 30 cm) 150 GSM	One	50 paise - Rs. 2.00
6	Hang Tag	-	One	Rs.1 - Rs.3
7	Plastic Bullets	-	5000	Rs. 85 - Rs. 95
8	Collar Film	Plastic	One	Rs.1 - Rs.3
9	Pins	Brass	450 Gms	Rs.2 - Rs. 3
10	Clips	Plastic	1 Gross	Rs. 14
11	Hanger	Plastic	One	Rs.1 - Rs.3
12	Size Rings	Plastic	One	80 paise
13	Gum Tapes	-	One Roll	Rs. 40
			72 Yards	
14	Carton Box	Cardboard 120 GSM 60 x 30 x 40	One	Rs.50

Mercerised Cotton Thread

3 ply	Art.No	TKt.No	Mts	Discount	Rate Black & White Colour
Coats	X 683	50	200 Mts	9.6%	75.20/Box
Vardhaman	B 205	50	200 Mts		76.70
Modi	T 7401/740	50	200 Mts		

(20 Tubes in one box)

Spun Polyester Thread Polyester Softened (3 Ply)

Name	Art.No	Tkt.No	Mts	Colours	Rate (Rs)
Madura	8784 n 61913	80	500	White Black natural or Unbleached	100.90 114.20
Vardhaman	B 044	80	5000	White Black	102.95 116.50

Tora & Challenge threads

Modi	T814	80	5000	White Black	102.65 116.50
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Modi Synthetic Threads. Discount 9.6%

International make Indian name Astra of Epic (1005 Polyester Thread) Madura Coats as Coats India

Name	Art.No	Tkt.No	Cone	White / Black & Colour	Discount
Madura (Ameto)	037 M	80	150 Mts	Rs.49.50	9.6%
Vardhaman (Tora)	B033	80	150 Mts	Rs.50.50	9.6%
Modi (Synthetic)	T912	80	150 Mts	Rs. 50.50	9.6%

B 033 = 15 Tubes in a Box

B 035 = 11 Tubes in a Box

T 912 - 15 Tubes in a Box

Swatch card

Objectives: At the end of this exercise you shall be able to

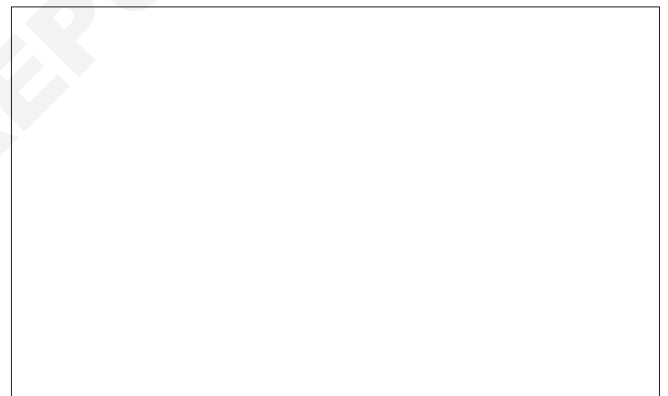
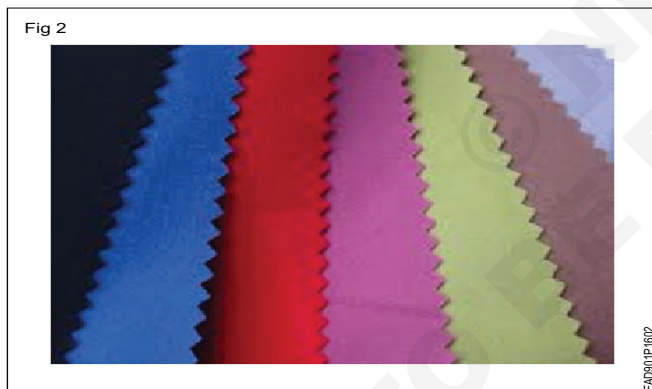
- identify different fabric
- collect the fabric swatches
- identify of warp and weft
- identify fiber from the given fabric
- find the direction of twist of yarn
- identify the structure of warp and weft yarn.

TASK 1 : Cut identical fabric pictures from magazine & stick in the place provided

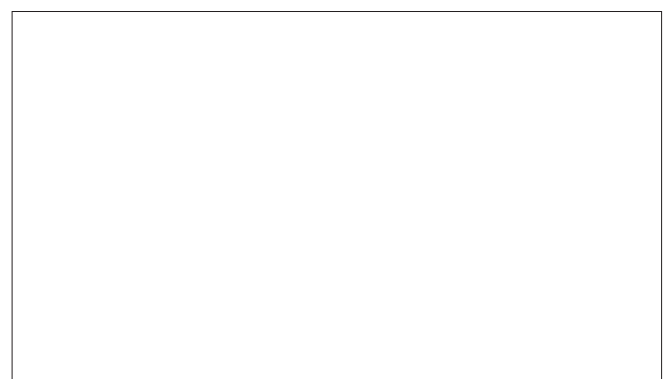
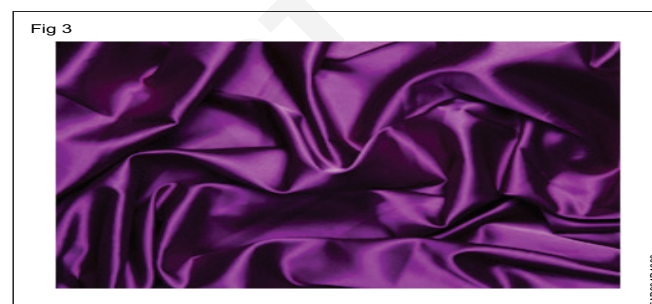
1 Cotton (Fig 1)



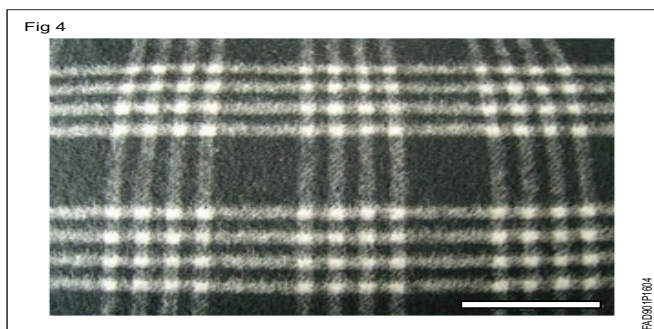
2 Polyester (Fig 2)



3 Silk (Fig 3)



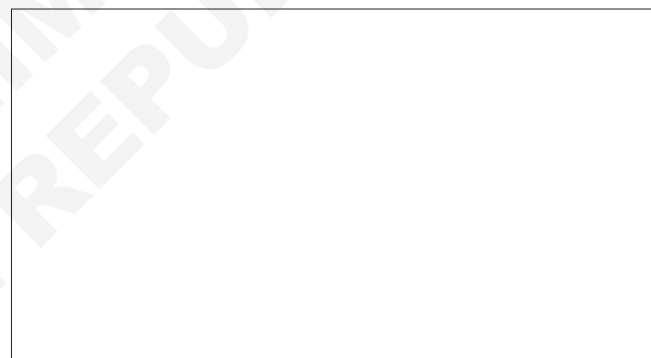
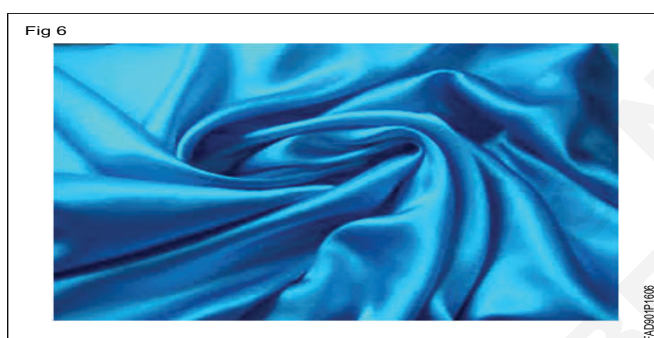
4 Wool (Fig 4)



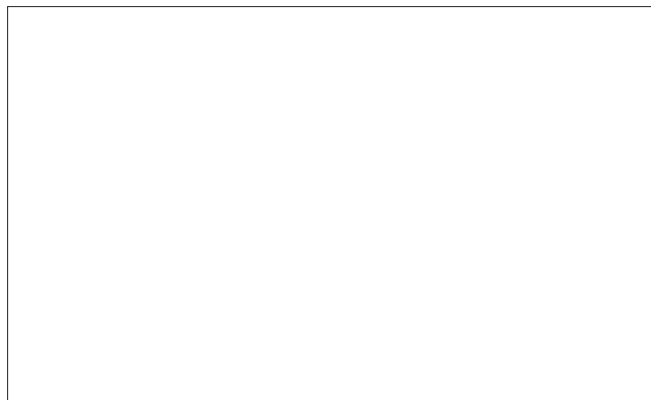
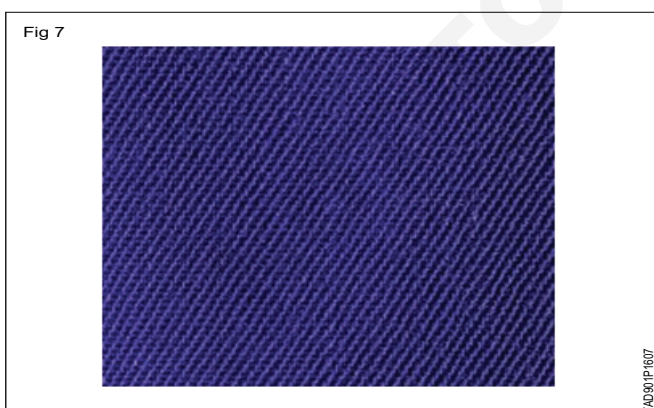
5 Poplin (Fig 5)



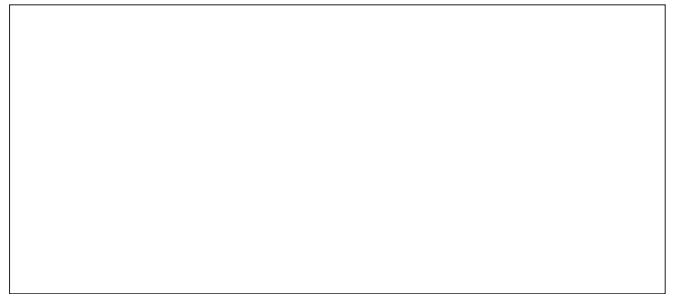
6 Satin (Fig 6)



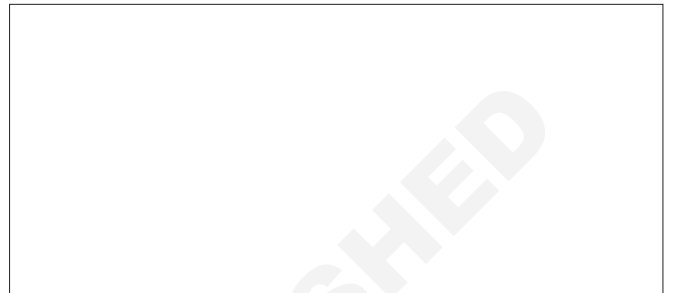
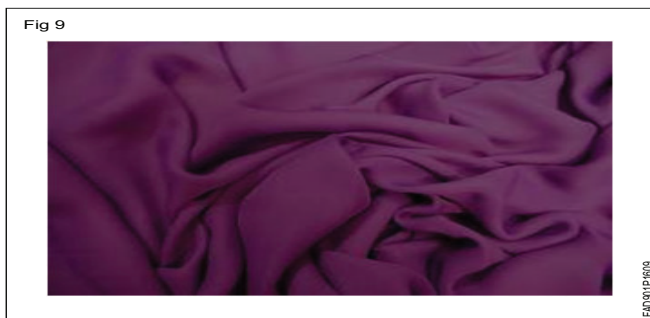
7 Twill (Fig 7)



8 Denim (Fig 8)



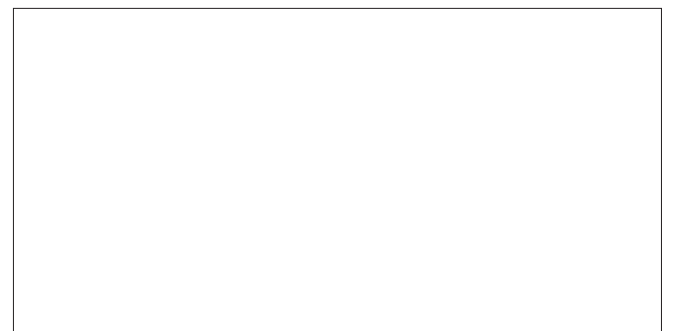
9 Georgette (Fig 9)



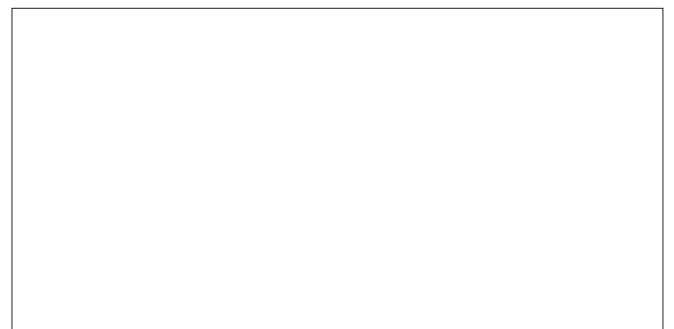
10 Jacquard (Fig 10)



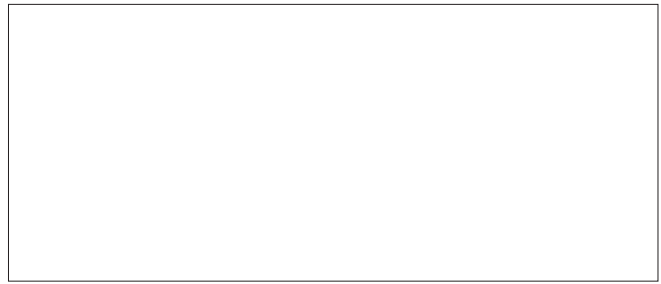
11 Brocade (Fig 11)



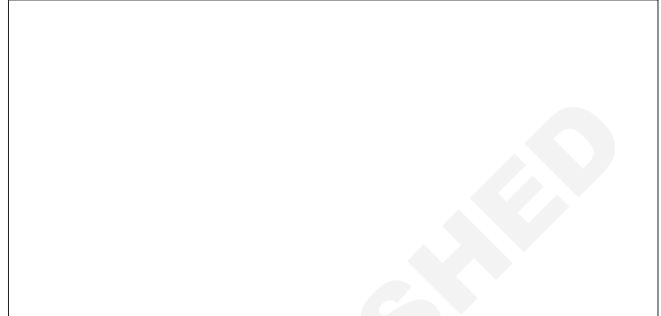
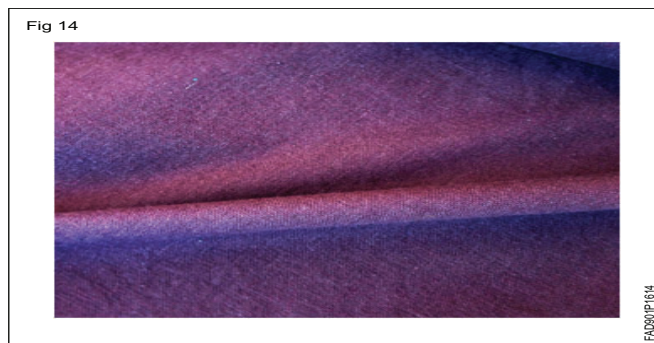
12 Chiffon (Fig 12)



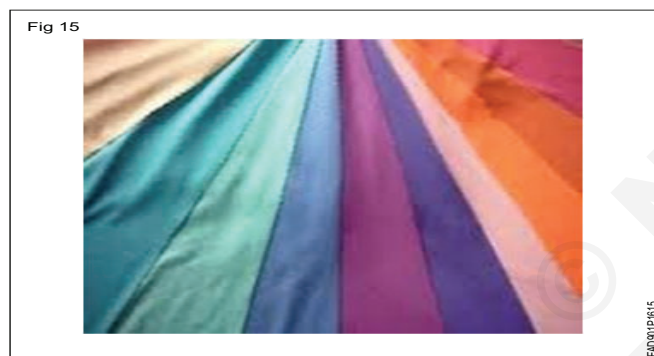
13 Crepe (Fig 13)



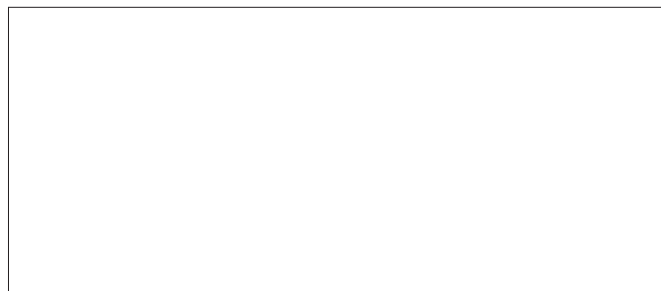
14 Jersey (Fig 14)



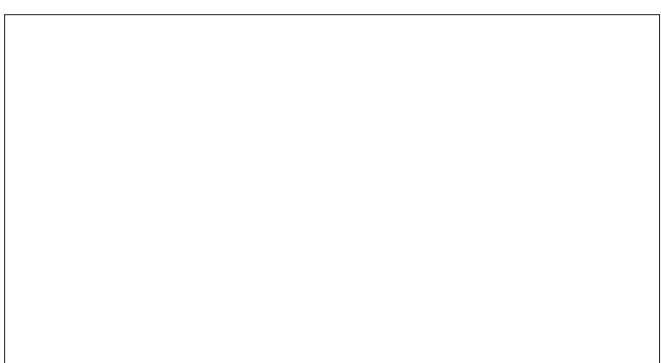
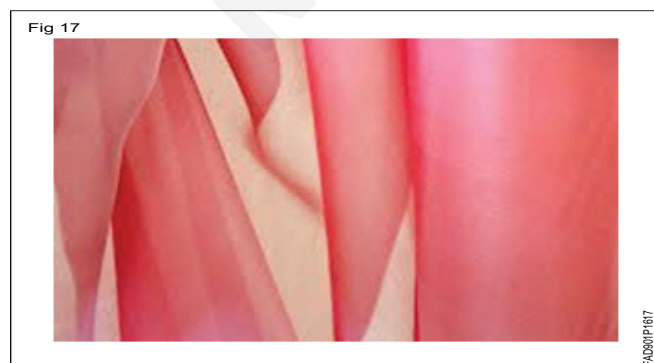
15 Lycra (Fig 15)



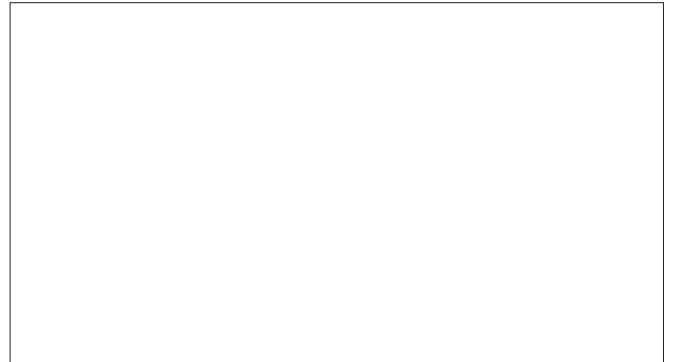
16 Rib (Fig 16)



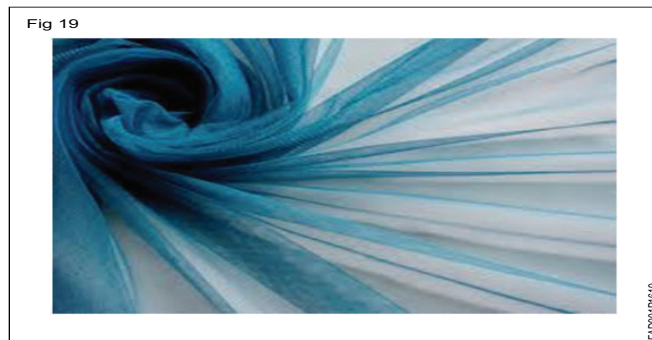
17 Sheer (Fig 17)



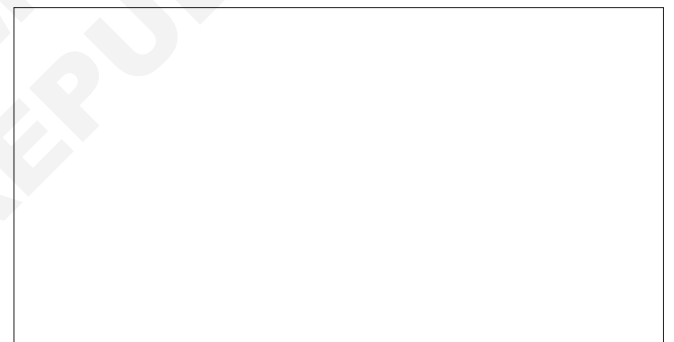
18 Lace (Fig 18)



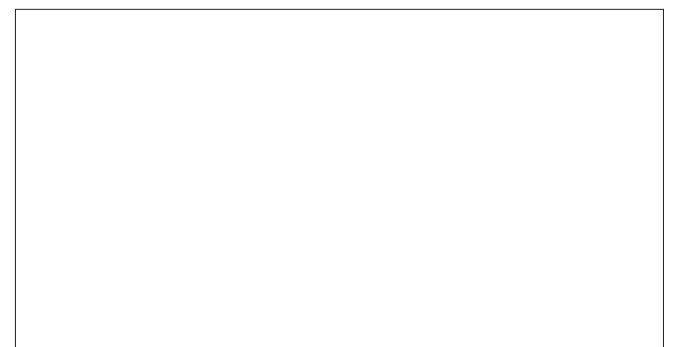
19 Net (Fig 19)



20 Linen (Fig 20)



21 Jute (Fig 21)



22 Banana (Fig 22)



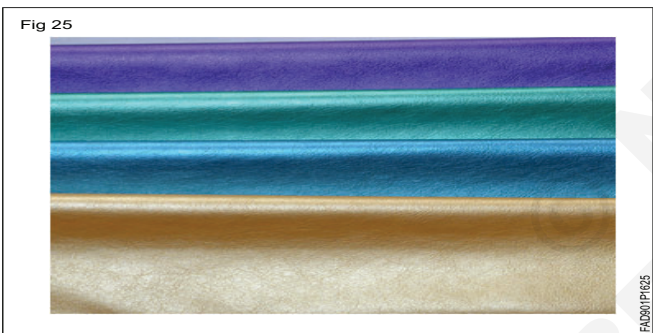
23 Dobby (Fig 23)



24 Organza (Fig 24)



25 Leather (Fig 25)



Practicing of taking body measurements

Objectives: At the end of this exercise you shall be able to

- take measurement of individual figure
- compare the standard measurement with individual measure
- take measurements in different ways from a garment.

Requirements

Tools/Instruments

- Measuring tape - 150cm - 1 set
- Shears - 150mm - 1 No.
- Scissors - 15cm (6 inch) - 1 No.
- L-scale - 60×30cm - 1 No.
- Scale - 30 cm - 1 No.
- Metal weights - as reqd.
- Awl - 1 No.
- Push pins - as reqd.

- Dress form - 1 No.

Materials

- Pencil or pen (2H) - 1 No.
- Cotton fabric 80cm×50cm - 1 No.
- Record note book - 1 No.
- Ladies Shirt - 1 No.
- Tailors chalk (contrast chalk) - 1 No.
- Drafting paper - 1 No.
- Eraser - 1 No.

PROCEDURE

TASK 1 : Body measurements

1 Bust round

Measure the figure at the fullest point of the bust; do not allow the tape to fall at the back.

2 Waist

Take this measurements round the waist, make sure it is comfortable.

3 Hip

Measure the widest part of the hips approximately 21 cm from the waistline.

4 Back width

Measure the back width 15 cm down from the neck bone at the centre back. Measure from armhole to armhole.

5 Chest

Measure the chest 7 cm down from the neck point at the centre front (armhole to armhole).

6 Shoulder

Measure from nape of the neck to the shoulder bone.

7 Neck size

Measure the base of neck touching front collar bone.

8 Dart

Take standard measurements from the size chart.

9 Top arm

Measure the biceps, make sure that the arm must be bent.

10 Wrist

Take the wrist measurement, around the wrist with slight ease.

11 Ankle

Measure around the ankle, just over the ankle bone.

12 High ankle

Measure along the leg, just above the ankle.

13 Nape to waist

Measure from the neck bone at the centre back string tied around the waist.

14 Front shoulder to waist

Measure from centre of the front shoulder and the tape along the bust point to waist.

15 Armhole depth

Take standard measurement and verify measurement with that.

16 Skirt length

Measure the skirt length from the waist and do the required hem length.

Measure from waist to the floor at the back and front to check that the balance of the figure is even.

17 Waist to hip

Measure from waist to the level of below the hip.

18 Waist to floor

Measure from waist to floor starting from centre body.

19 Body rise

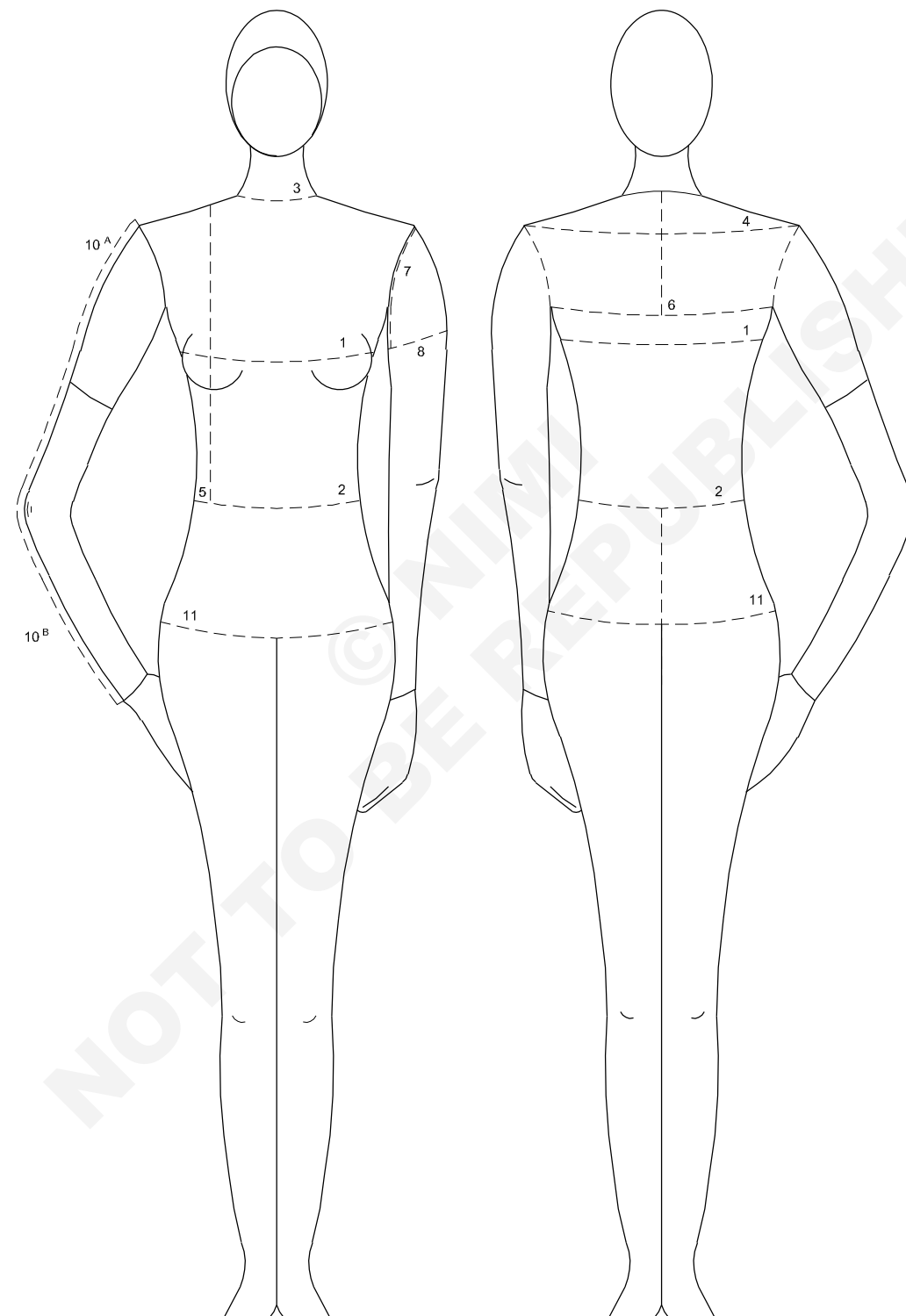
The subject should sit on a hard chair. Take the measurements at the side from the waist to the chest.

20 Sleeve length

Place the hand on hip so that the arm is bent. Measure from shoulder bone and bring the tape along the elbow to wrist bone above the little finger.

The list of individual measurements should be carefully checked against the list standard measurements and any great deviation accounted for. The blocks can then be drafted using the student's individual measurements.

Fig 1



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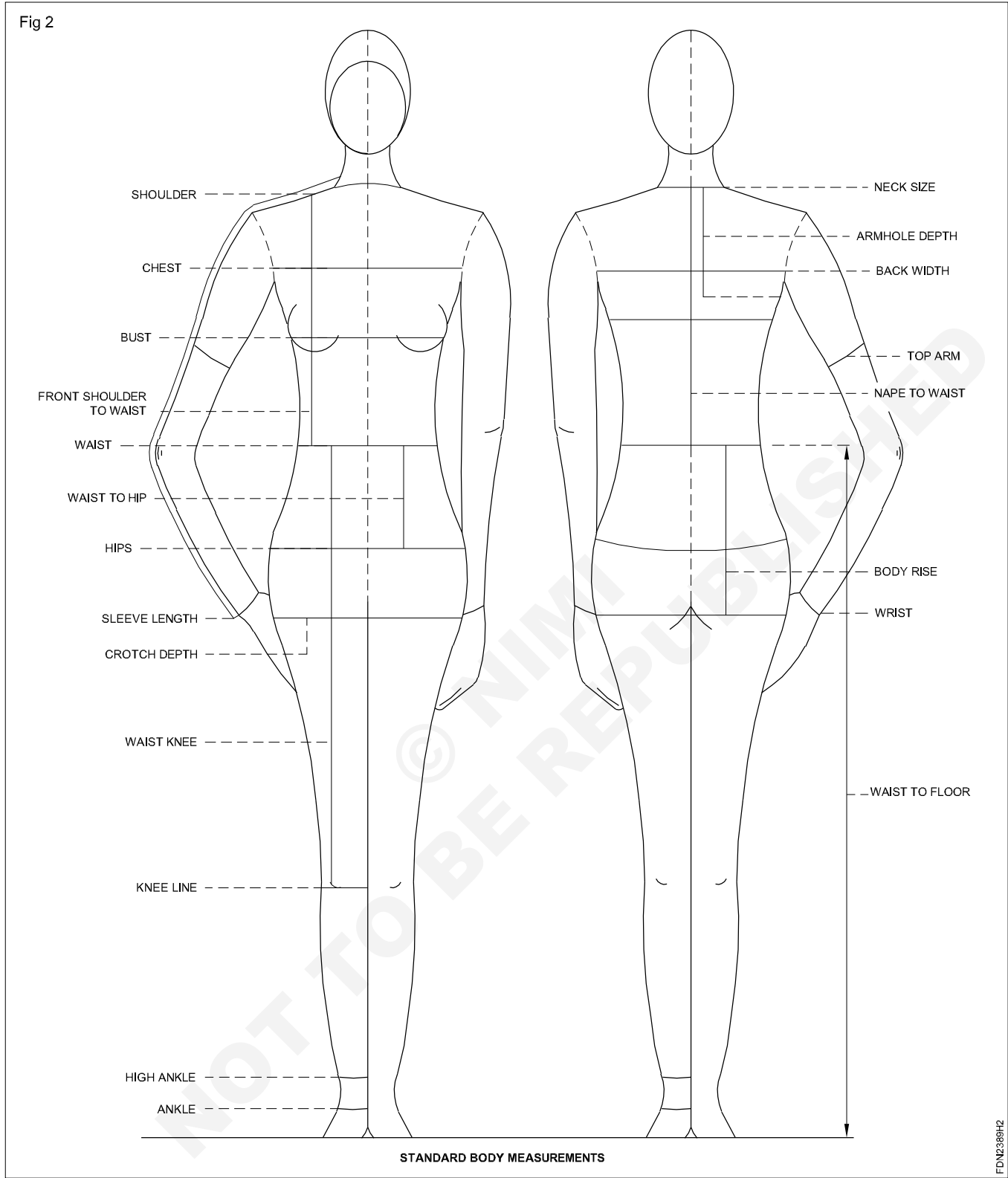
Table 1

Standard body measurements

This largest percentage of the population falls into medium high range. Although the girth of women varies, the general trend is for weight to increase with height. This feature is reflected in the size charts.

Women of Medium Height 160cm-170cm (5ft 21/2in-5ft 61/2in)												
Size Symbol	8	10	12	14	16	18	20	22	24	26	28	30
Bust	80	84	88	92	97	102	107	112	117	122	127	132
Waist	60	64	68	72	77	82	87	92	97	102	107	112
Hips	85	89	93	97	102	107	112	117	122	127	132	137
Back width	32.4	33.4	34.4	35.4	36.6	37.8	39	40.2	41.4	42.6	43.8	45
Chest	30	31.2	32.4	33.6	35	36.5	38	39.5	41	42.5	44	45.5
Shoulder	11.75	12	12.25	12.5	12.8	13.1	13.4	13.7	14	14.3	14.6	14.9
Neck size	35	36	37	38	39.2	40.4	41.6	42.8	44	45.2	46.4	47.6
Dart	5.8	6.4	7	7.6	8.2	8.8	9.4	10	10.6	11.2	11.8	12.4
Top arm	26	27.2	28.4	29.6	31	32.8	34.4	36	37.8	39.6	41.4	43.2
Wrist	15	15.5	16	16.5	17	17.5	18	18.5	19	19.5	20	20.5
Ankle	23	23.5	24	24.5	25.1	25.7	26.3	26.9	27.5	28.1	28.7	29.3
High ankle	20	20.5	21	21.5	22.1	22.7	23.3	23.9	24.5	25.1	25.7	26.3
Nape to waist	39	39.5	40	40.5	41	41.5	42	42.5	43	43.2	43.4	43.6
Front shoulder to Waist	39	39.5	40	40.5	41.3	42.1	42.9	43.7	44.5	45	45.5	46
Armhole depth	20	20.5	21	21.5	22	22.5	23	23.5	24.2	24.9	25.6	26.3
Waist to knee	57.5	58	58.5	59	59.5	60	60.5	61	61.25	61.5	61.75	62
Waist to Hip	20	20.3	20.6	20.9	21.2	21.5	21.8	22.1	22.3	22.5	22.7	22.9
Waist to Floor	102	103	104	105	106	107	108	109	109.5	110	110.5	111
Body Rise	26.6	27.3	28	28.7	29.4	30.1	30.8	31.5	32.5	33.5	34.5	35.5
Sleeve Length	57.2	57.8	58.4	59	59.5	60	60.5	61	61.2	61.4	61.6	61.8
Sleeve Length (Jersey)	51.2	51.8	52.4	53	53.5	54	54.5	55	55.2	55.4	55.6	55.8
Extra Measurements (garments)												
Cuff size shirts	21	21	21.5	21.5	22	22.5	23	23.5	24	24.5	25	25.5
Cuff size, Two Piece sleeve	13.25	13.5	13.75	14	14.25	14.5	14.75	15	15.25	15.5	15.75	16
Trouserbottom Width	21	21.5	22	22.5	23	23.5	24	24.5	25.4	26.2	27	27.8
Jeans bottom Width	18.5	18.5	19	19	19.5	20	20.5	21	25.4	26.2	27	27.8

TASK 2 : Measure standard body measurements



Practice on different types spreading, using different types of fabrics

Objectives: At the end of this exercise you shall be able to

- spread plain fabric - without right side & wrong side difference
- spread plain fabric - with right side & wrong side difference
- spread one way fabric - without right side & wrong side difference
- spread one way fabric - with right side & wrong side difference.

Requirements

Tools / Instruments

- Cutting table - 1 No.
- Measuring tape - 1 No.
- Meter scale - 1 No.
- Scissors - 1 No.
- Cello tape - 1 No.
- Marking chalk - 1 No.

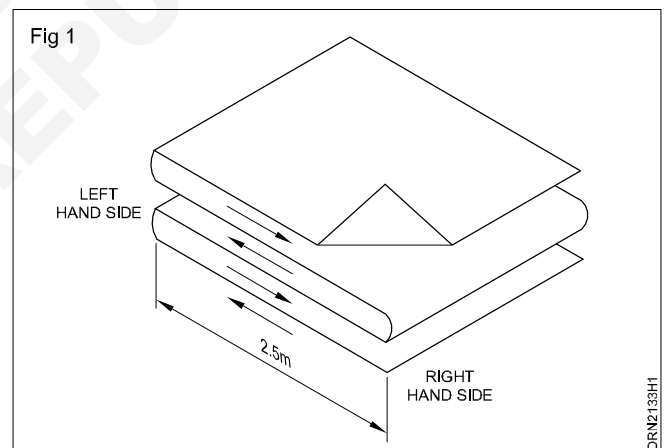
Materials

- Plain design fabric - 10 m.
- Plain design one side fabric - 10 m.
- One way fabric - 10 m.
- One way one side fabric - 10 m.

PROCEDURE

TASK 1: Spread plain fabric - without right side & wrong side difference

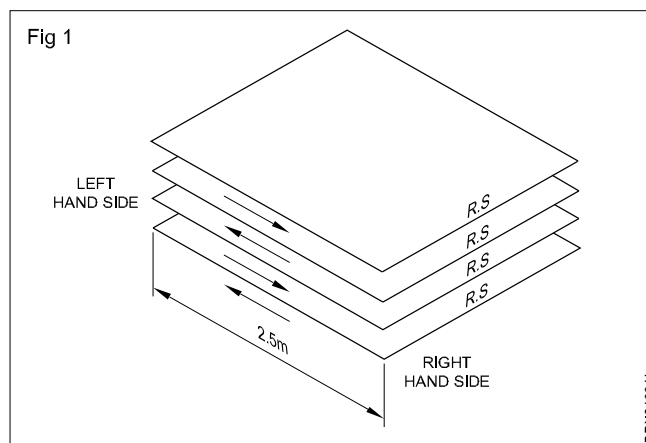
- 1 Place the plain fabric (without right side & wrong side difference) on the cutting table.
- 2 Take the one end of the fabric and measure 2.5m with the help of the measuring tape.
- 3 Mark the length at one selvage with the help of marking chalk.
- 4 Spread the fabric on the cutting table right hand side to left hand side without wrinkles, Ensure that the both the selvage of the fabric should be parallel to the table edges.
- 5 At the end of 2.5m, fold the fabric on cross wise straight and spread the fabric left to right on the first lay. Remove the wrinkles if any.
- 6 After reaching the 2.5m length at the right end, Fold the fabric on crosswise straight and spread the fabric right to left for the 3rd lay.
- 7 Continue this, for 4th lay also. (Fig 1)



TASK 2: Spread plain fabric - with right side & wrong side difference

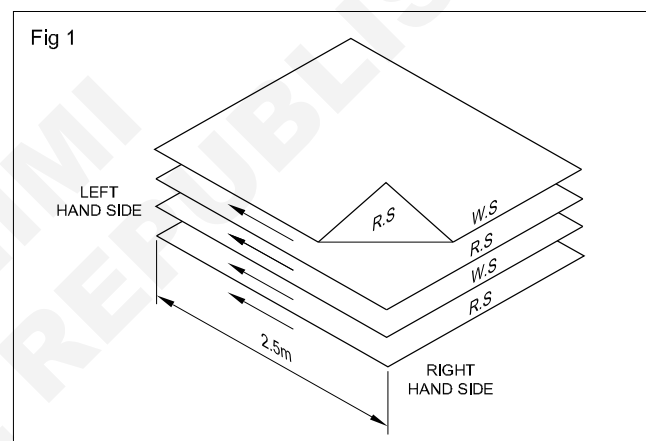
- 1 Place the plain fabric (with right side & wrong side difference) on the Cutting table.
- 2 Identify the right side (Face side) of the fabric.
- 3 Take the one end of the fabric and measure 2.5m with the help of the measuring tape.
- 4 Mark the length at one selvage on right side with the help of marking chalk.
- 5 Spread the fabric with right side up (Face up) on the cutting table from right hand side to left hand side without wrinkles, Ensure that the both the selvage of the fabric should be parallel to the table edges.
- 6 At the end of 2.5m, fold the fabric on cross wise straight and cut the fabric on fold with sharp shears.
- 7 Now turn the fabric to the right side up (Face up) and spread the fabric left to right on the first lay. Remove the wrinkles if any.

- 8 After reaching the 2.5m length at the right end, Fold the fabric on crosswise straight and cut the fabric on fold. Now turn the fabric to the right side up (Face up) and spread the fabric right to left for the 3rd lay.
- 9 Continue this, for 4th lay also. (Fig 1)



TASK 3: Spread one way fabric - without right side & wrong side difference

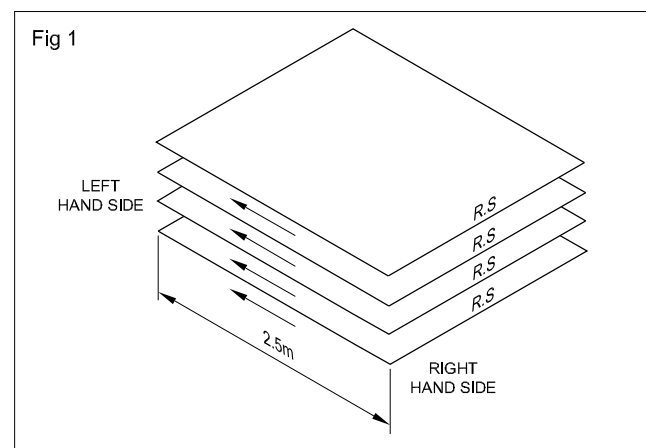
- 1 Place the one way fabric (without right side & wrong side difference) on the Cutting table.
- 2 Take the one end of the fabric and measure 2.5m with the help of the measuring tape.
- 3 Mark the length at one selvedge with the help of marking chalk.
- 4 Spread the fabric on the cutting table from right hand side to left hand side without wrinkles, Ensure that the both the selvedge of the fabric should be parallel to the table edges.
- 5 At the end of 2.5m, fold the fabric on cross wise straight and cut the fabric on fold with sharp shears.
- 6 Now again come to the right hand side and spread the fabric right to left on the first lay. Remove the wrinkles if any.
- 7 After reaching the 2.5m length at the left end, Fold the fabric on crosswise straight and cut the fabric on fold. Now again come to the right hand side and spread the fabric right to left for the 3rd lay.
- 8 Continue this, for 4th lay also. (Fig 1)



TASK 4: Spread one way fabric - with right side & wrong side difference

- 1 Place the one way fabric (with right side & wrong side difference) on the Cutting table.
- 2 Identify the right side (Face side) of the fabric.
- 3 Take the one end of the fabric and measure 2.5m with the help of the measuring tape.
- 4 Mark the length at one selvedge on right side with the help of marking chalk.
- 5 Spread the fabric with right side up (Face up) on the cutting table from right hand side to left hand side without wrinkles, Ensure that the both the selvedge of the fabric should be parallel to the table edges.
- 6 At the end of 2.5m, fold the fabric on cross wise straight and cut the fabric on fold with sharp shears.
- 7 Now turn the fabric to the right side up (Face up) and again come to the right hand side. Spread the fabric right to left on the first lay. Remove the wrinkles if any.
- 8 After reaching the 2.5m length at the left end, Fold the fabric on crosswise straight and cut the fabric on fold. Now turn the fabric to the right side up (Face up) and again come to the right hand side. Spread the fabric right to left for the 3rd lay.
- 9 Continue this, for 4th lay also. (Fig 1)

Get the work checked by your instructor.



Practicing on different types of layout using the given pattern using

Objectives: At the end of this exercise you shall be able to

- make the fabrics ready for layout
- practice on different types of pattern layouts.

Requirements

Tools / Instruments

- Shears - 1 No
- Iron box - 1 No
- Cutting table - 1 No
- Metre scale - 1 No
- Measuring tape - 1 No
- Pattern weights - as reqd.

Materials

- Plain poplin fabric - 3 metres
- Printed one way fabric - 3 metres
- Pattern set of different styles - 6 Nos.
- Sharp pins

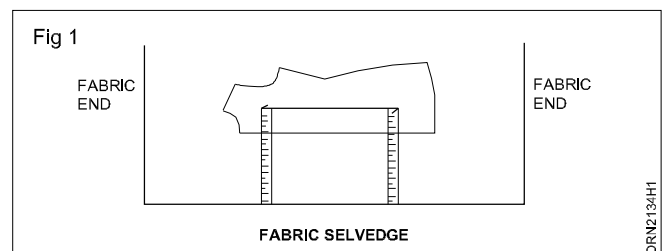
PROCEDURE

TASK 1: Make the fabrics ready for layout

- 1 Place the fabrics on the cutting table.
- 2 Check the end of the fabrics. The ends should be straight along crosswise direction and perpendicular to the selvages. If not, cut the ends straightly with a sharp shears.
- 3 Check the perfection of the grains of the fabrics. If not, make the grain perfect by stretching method. For that, stretch the fabric at 45° angle on the both right to left and left to right directions to make the grain perfect.
- 4 Check the fabric that without any wrinkles. Otherwise, press the fabrics with an iron box to make them without creases and wrinkles.

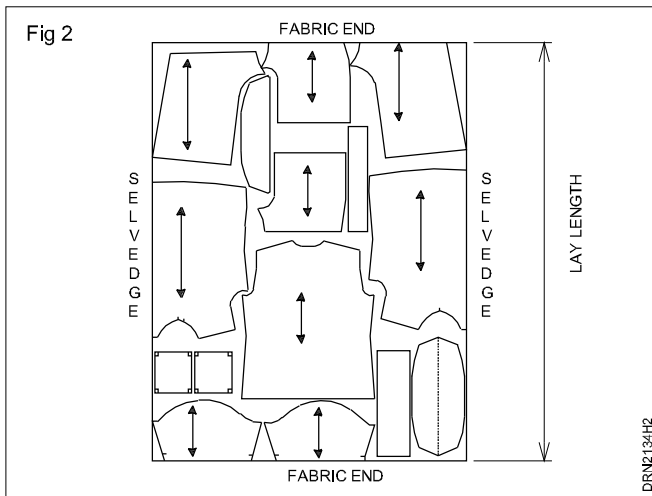
TASK 2: Practice different types of pattern layouts

- 1 Place the poplin fabric right side up on the cutting table.
- 2 Check the ensure whether the fabric on the table is in straight condition. For that, ensure the selvages of the fabric should be parallel to the edges of the cutting table.
- 3 Take one set of patterns and check whether all the pieces are available.
- 4 Place pattern on the fabric. Start from one end of the fabric.
- 5 The patterns should be laid out on the grains that means in warp direction of the fabric weave.
- 6 Place the main and large patterns with wider ends at the cut ends of the fabric first.
- 7 Place the small pieces in the gaps of the large pattern pieces.
- 8 Use sharp pins or weights to keep the patterns stable on the fabric.
- 9 Take care to lay the patterns to the directions indicated by grain line marks.
- 10 Check the grain lines of the patterns are parallel to the selvages of the fabric. To ensure this, measure with the help of a scale and adjust the pattern so that both ends of the straight grain line are the same distance from the selvedge and pin the pattern to the fabric along the grain line arrow. (Fig 1)
- 11 Place the patterns in an economical way. Lay pattern pieces close together.
- 12 Try to place many pieces as possible near the selvage ends for getting more free space.
- 13 Try to place the wider end of one pattern piece beside the narrow end of the another pattern piece.
- 14 Place the similar pattern pieces similar in shape next to each other.



15 Check that all the patterns are laid out of the fabric.
Try to understand this **open layout** type and method.

16 Measure the lay length of fabric consumption with the help of a measuring tape from one end of the fabric to the end of the patterns that placed last in the other side of the fabric. (Fig 2)



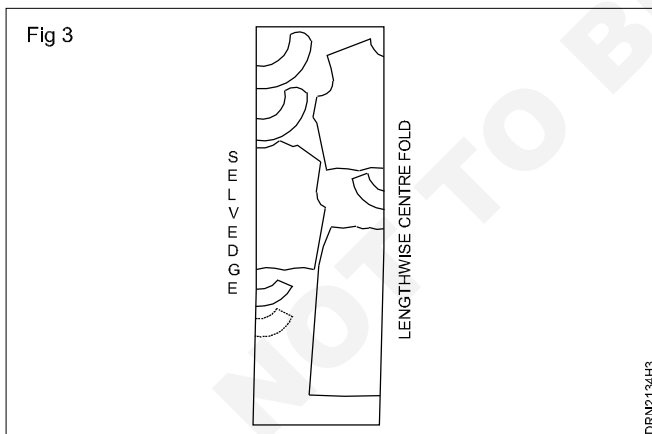
17 Try to do different layouts and note the lay length.
Finally select one pattern layout which gives the minimum fabric consumption. (Lay length)

18 Remove all the used pattern pieces.

19 Fold the fabric down the middle parallel to the selvages so that the selvages come together to get **lengthwise centre fold layout** type.

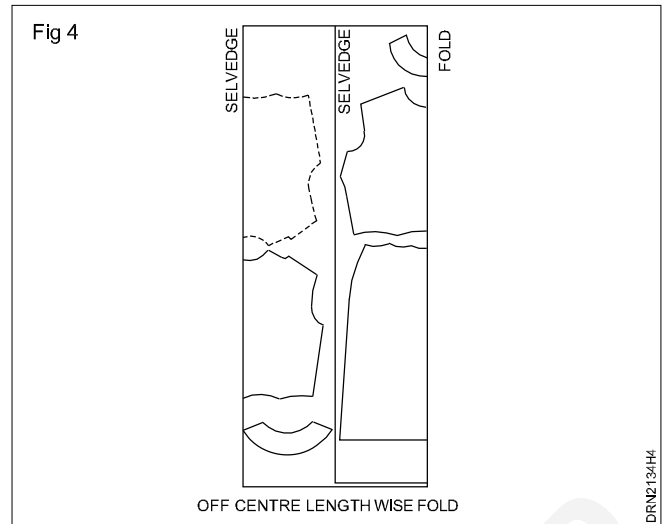
20 Use another set of patterns and follow the steps used in the open layout method.

21 Fold lines of the patterns should be kept on the folded edges of fabrics. (Fig 3)

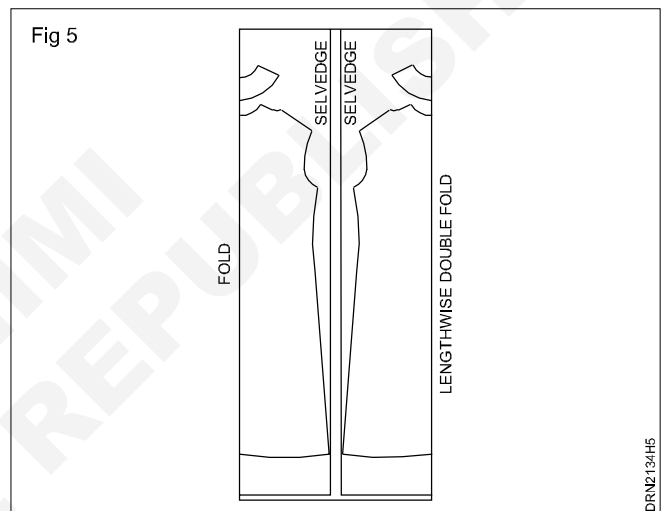


22 Next, take a new set of patterns and make the fold of the fabric off centre and parallel to the selvage to get the **off centre lengthwise fold layout** type.

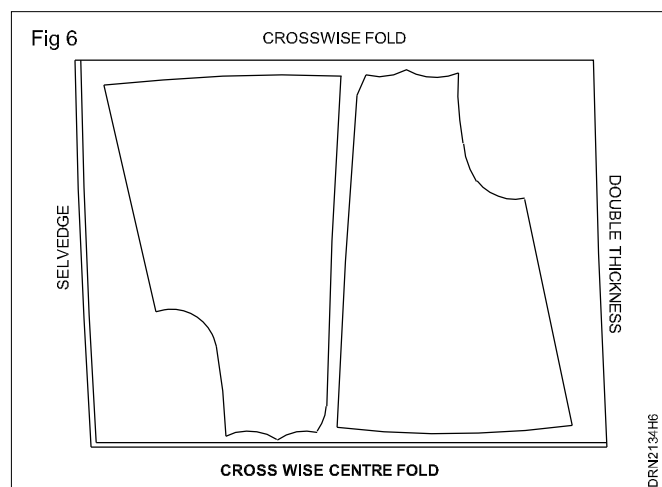
23 Make the pattern layout of this type. (Fig 4)



24 Fold the both selvages of the fabrics so that they can meet at the centre of the fabric width so as to get the **lengthwise double fold layout** type. (Fig 5)



25 Fold the fabric centre crosswise and practice the layout so as to get the crosswise centre fold layout. (Fig 6)



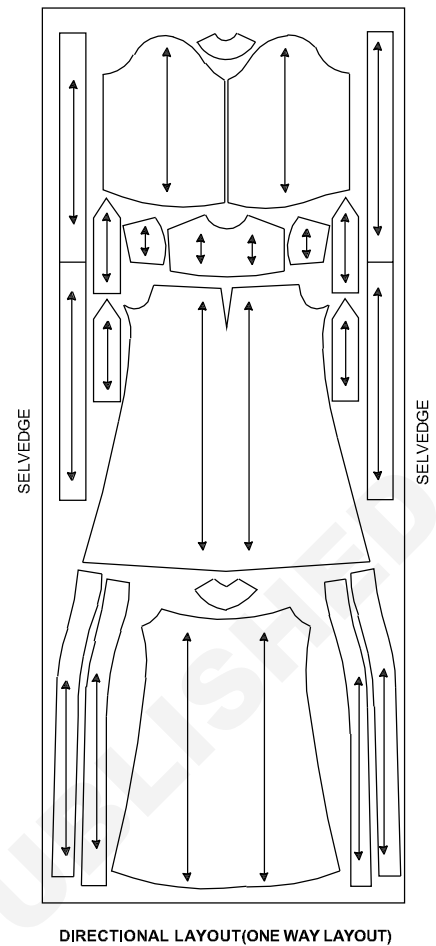
- 26 Place the printed one way fabric on the cutting table.
- 27 Follow the open layout method, but place all the pattern pieces in the same direction for getting directional layout or one way layout. (Fig 7)

Fold widthwise means to fold the material along the weft line ie., the fold will appear in widthwise direction but will part the length of the material.

Fold lengthwise means to fold the material along the warp line ie., the width of the material is folded parallel to the selvedge.

Get the work checked by your instructor.

Fig 7



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Bloomer - Upper garment

Objectives: At the end of this exercise you shall be able to

- prepare paper pattern of bloomer
- prepare layout
- stitch bloomer - upper garment.



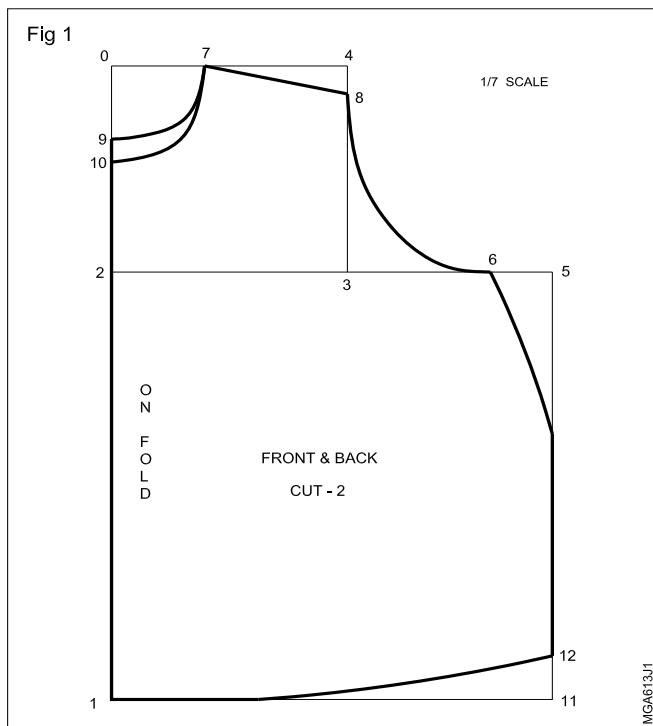
Scan the QR Code to view
the video for this exercise

Fig 1



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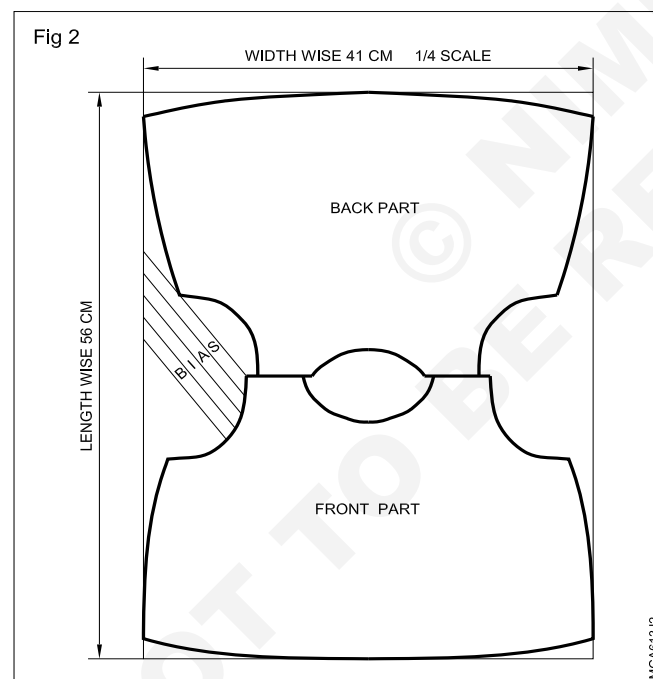
Measurement	Materials
Chest = 45cm Full length = 26cm Shoulder = 18cm	56cm x 41cm Cotton/Terry cotton/Printed cloth/Cambric



INSTRUCTION FOR DRAFTING

Upper garment

- 0-1 = Full length + 2.5cm
- 0-2 = $\frac{1}{4}$ chest - 2.5cm
- 0-4 = $\frac{1}{2}$ of shoulder width + $\frac{1}{2}$ cm
- 3 is squared down from 4
- 2-5 = $\frac{1}{4}$ chest + 4cm
- square down a line from 5 to 11
- 5-6 = 2.5cm
- Make a side shape
- 11-12 = above 2cm
- 0-7 = $\frac{1}{12}$ chest - $\frac{1}{2}$ cm
- 0-9 = 2cm
- 0-10 = $\frac{1}{12}$ chest + $\frac{1}{2}$ cm
- 4-8 = 1cm
- Join 7 & 8



INSTRUCTIONS FRO MASTERN PATTERN

Front and back

- Sides - 2.5cm
- Necklines - 0.75cm
- Shoulders - 1.5cms
- Bottom turning - 4cms
- Armhole - 0.75cm

PROCEDURE

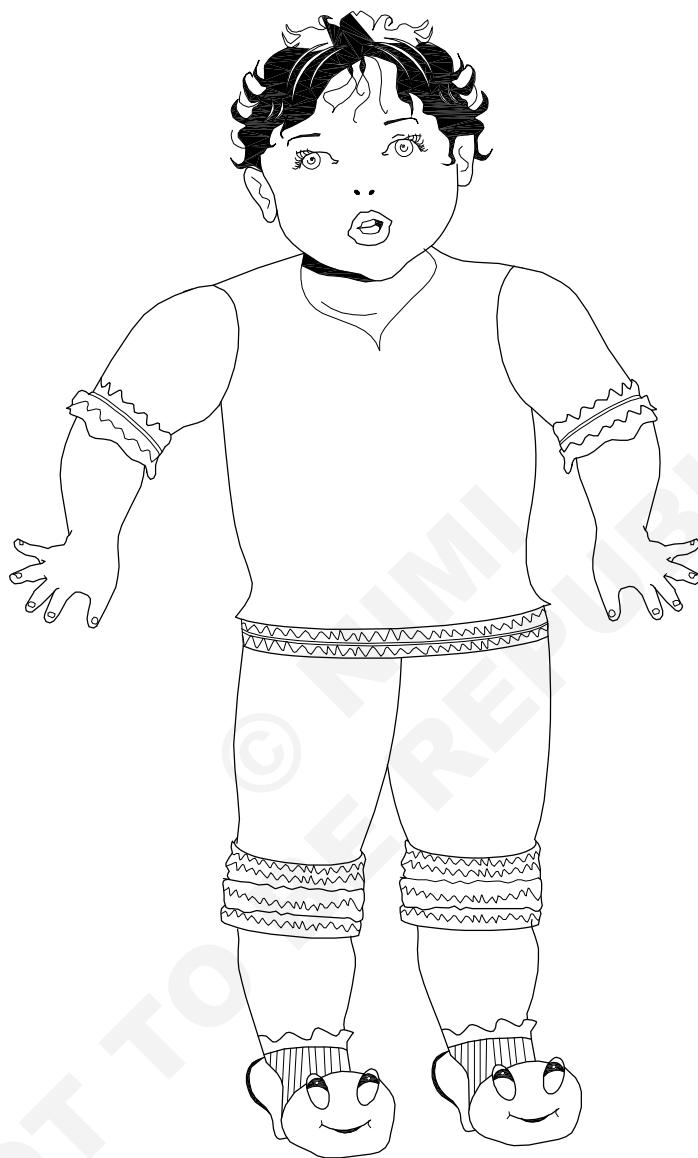
- 1 Take the required measurement for drafting a bloomer – upper garment
- 2 Prepare paper pattern
- 3 Prepare master pattern and layout to calculate the fabric required
- 4 Cut the fabric into bloomer components as drafted in the master pattern
- 5 Join the front and back part together at the shoulders with a plain seam.
- 6 Finish the necklines and armholes by bias facing (Ref Ex.6.04)
- 7 Stitch the garment at their sides about 2cms from the edge with a plain seam.
- 8 Fold the bottom and machine stitch it.
- 9 Lace or frills can be attached at the finished necklines and bottom.
- 10 Finish and press it.

Bloomer - Under garment

Objectives: At the end of this exercise you shall be able to

- prepare paper pattern
- prepare layout
- attach elastic at waistline and bottoms
- stitch bloomer - upper garment.

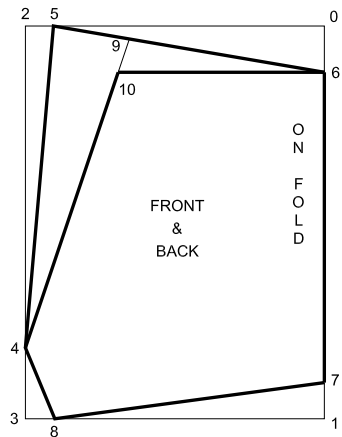
Fig 1



mga114h1

Measurement	Materials
Seat = 52cm Full length = 20cm Shoulder = 18cm	35cm x 86cm Cotton/Printed cotton/Cambric/Poplin 2 inch elastic

Fig 1



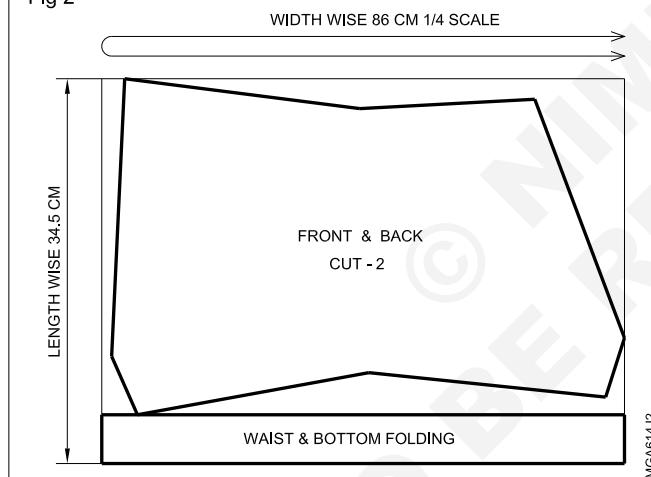
INSTRUCTION FOR DRAFTING

Upper garment

- 0-1 = Full length + 8cm
- 2-0 = $\frac{1}{3}$ seat + 4cm
- 3-2 = Straight line
- 4-2 = $\frac{1}{3}$ seat + 6cm
- 5-0 = $\frac{1}{3}$ seat + $2\frac{1}{2}$ cm
- 6-0 = 3.5cm
- 7-1 = $2\frac{1}{2}$ cm
- 8-3 = inside 2cm
- 6,5,4,8,7 is a front part
- 9-0 = below 2.5cm

Layout of bloomer

Fig 2



Inner leg

- Sides - 2.5cms
- Waist line - 1cm
- Bottom line = 1cm
- Waist band and bottom band - 075cm all around

- 1 Take the necessary measurement for drafting a bloomer under garment
- 2 Prepare paper pattern with the help of the instructions for drafting.
- 3 Prepare layout to estimate the material required for stitching bloomer.
- 4 Prepare master pattern.
- 5 Lay the pattern on the wrong side of the fabric and marks its drafting using the chalk..
- 6 Cut the components as marked.
- 7 Join the inner legs with a seam.
- 8 Join the centre back and centre front of both the legs continuously together with a plain seam.
- 9 Stitch and attach waist band at the waist line and introduce elastic of $\frac{1}{3}$ length of the waist line.
- 10 Similarly finish the bottom of both the legs by introducing the elastic inside band stitched as in the case of waist line.
- 11 Finish and press it.

Yoke Frock

Objectives: At the end of this exercise you shall be able to

- stitch a baby set with puff sleeves and smocking on yoke and sleeve
- finish neck bias binding.

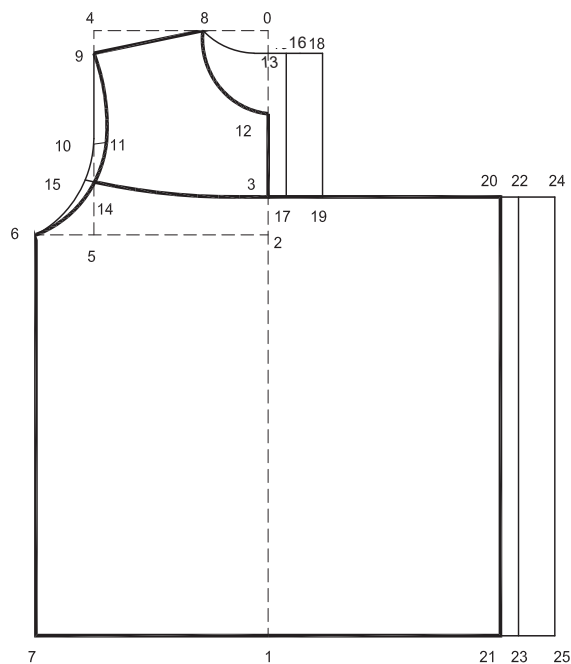


CAP139E1

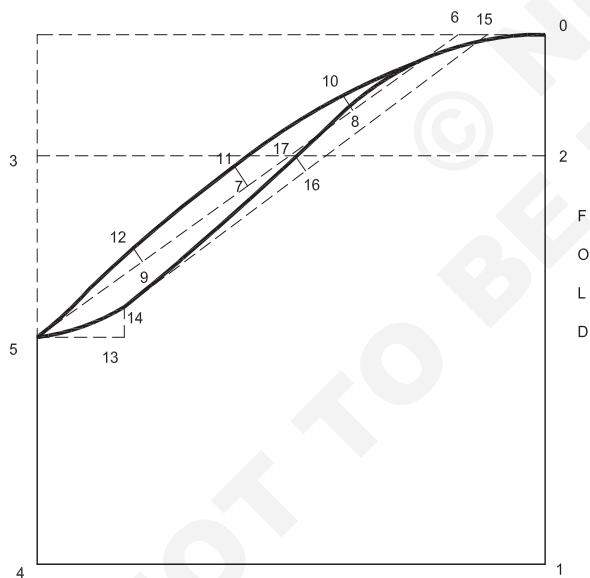
Measurements (Medium)	Material
Frock Full length = 40 cm Shoulder = 24 cm Chest = 54 cm Sleeve length = 13 cm	1.25 x 0.90 m Rubia/Cambic Elastic (2/3 of Hip + 2.5 cm + seam of 1 cm width) 4 press buttons
Janghia Hip = 54 cm	

INSTRUCTIONS FOR DRAFTING

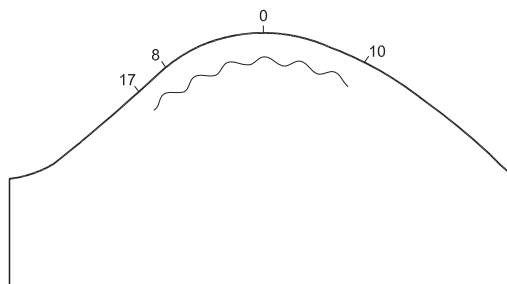
Fig 2



FRONT AND BACK
(OF YOKE AND SKIRT)



ENLARGED VIEW OF SLEEVE



SLEEVE (GATHERED PORTION)

Frock (Front and back)

0-1 = FL
0-2 = Ch/4
0-3 = Ch/4 - 2.5 cm
0-4 = Sh/2
2-6 = Ch/4 + 2.5 cm
0-8 = Ch/12
4-9 = Ch/36
9-10 = 1/2 of 9-5
10-11 = 1 cm

0-12 = Ch/12 + 1 cm
0-13 = 1.5 cm
5-14 = 2-3 + 1 cm

13-16 = 1.25 cm
16-18 = 2.5 cm
3-20 = 2-6
20-22 = 1.25 cm

22-24 = 2.5 cm

Sleeve

0-1 = SL + Ch/12 (for puff)
1-2 = SL
2-3 = Ch/4 + 4 cm
3-5 = Ch/12 + 1.5 cm
0-6 = 3 cm

8-10 = 0.6 cm
7-11 = 0.8 cm
9-12 = 0.6 cm

5-13 = 3 cm
13-14 = 1 cm
0-15 = 2 cm

16-17 = 0.6 cm

Square out horizontally and vertically from 0
Square out from 1
Square out from 2

Square down and mark 5
Square down from 6 and mark 7

Join 8-9

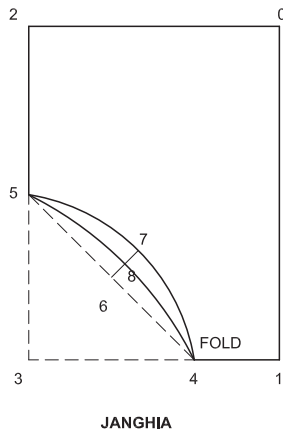
Shape 9-11-6 (front armhole)
Shape 9-10-6 (back armhole)
Shape 8-12
Shape 8-13
Shape 3-14 and extend up to the back shape mark 15
Square out from 13, 3, 1
Square down and mark 17
Square down and mark 19
Square down and mark 21
Square down and mark 23 (overlap)
Square down and mark 25 (facing)

Square out horizontally and vertically from 0

Square out from 1 and 2
Square down from 3 and mark 4

Join 5-6
Divide line 5-6 in 4 equal parts and mark 7, 8 and 9
Square up from 7, 8 and 9

Shape 5-12-11-10-0 (back crown shape)
Square out from 5
Square up from 13
Join 14-15
Mark 16 on the centre of 14-15 and square up
Shape 5,-4-17-0 (front crown shape)
Gathers are set from 10-0-8-17 on sleeve crown



Janghia

$$0-1 = FL = H/3 + 3.5 \text{ cm}$$

$$0-2 = H/4 + 2.5 \text{ cm}$$

$$1-4 = H/12 + 1 \text{ cm}$$

$$3-5 = 3-4$$

$$6-7 = 2.5 \text{ cm}$$

$$6-8 = 1.25 \text{ cm}$$

Square out horizontally and vertically from 0

Square out from 1

Square down from 2 and mark 3

Join 4-5

Mark 6 on the centre of 4-5

Square up from 6

Shape 5-7-4 (front)

Shape 5-8-4 (back)

INSTRUCTIONS FOR MASTER PATTERN

Yoke frock

shoulder, armhole of the yoke front and back	0.75 cm
top of waist skirt (front and back)	1 cm
side seam of skirt (front and back)	1.5 cm
bottom hem	5 cm

Sleeve

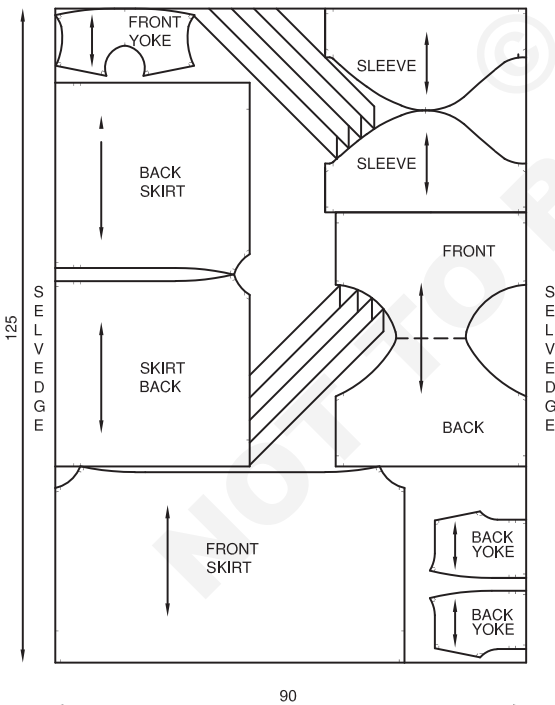
sleeve crown	0.75 cm
side	1.5 cm
bottom	1 cm

Janghia

bottom	0.75 cm
sides	1.5 cm
for elastic insertion	2 cm

Balance marks: facing (16-17, 22-23), centre of yoke and skirt, centre of sleeve crown

Fig 2



CUT COMPONENTS

FROCK

FRONT YOKE	1	BACK SKIRT	2
BACK YOKE	2	SLEEVE	2
FRONT SKIRT	1	BIAS STRIP	

JANGHIA

FRONT AND BACK	1	BIAS STRIP	
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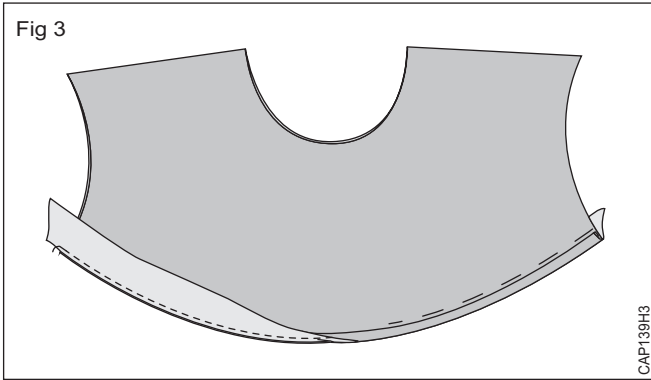
CAP139H2

- Draw a draft of baby set (Yoke frock and janghia) according to the given measurement and instructions for drafting. (Fig 1)

Note: Draw frock pieces front and back of yoke and skirt separately on single layer of brown paper.

- Draw sleeves on double layer of brown paper. Draw janghia also on double layer. Keep fold at the bottom
- Separate front and back on yoke line. Prepare master pattern.
- Cut components, sleeve and janghia following the method described in Ex.20.
- Layout on cloth: mirror front yoke and front skirt and janghia to get the proper shape of component. Other components use twice. Mark and cut. (Fig 2)
- Prepare smocking in front of frock at top and at sleeve bottom. (SS.No. 1)
- Stitch the yoke frock. Attach bias binding on the lower edge of front and back yoke. Place bias strip over yoke, matching edged and baste. Stitch close to basting. Turn bias strip towards wrong side of yoke leaving 0.5cm of bias binding strip visible from right side baste. (Fig 3)

Fig 3

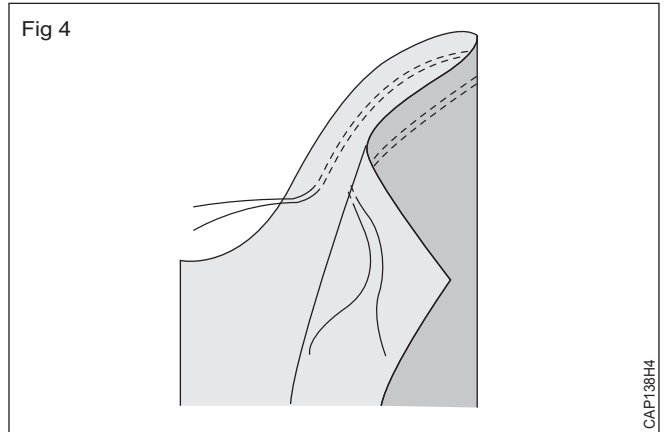


CAP139H3

Note: Don't fold seam allowance but keep it inside the binding. Maintain also the width of bias fold

- Gather upper part of skirt back with machine.
- Stitch yoke with upper part of front and back skirt leaving 5cm without gathering at the centre of back (for overlapping and facing purpose).
- Turn the facing of both sides at the back centre.
- Join front and back shoulder with plain seam.
- Finish neck with bias binding. (SS.No.22)
- Join front and back side of frock.
- Turn the bottom of the frock on the mark line, baste and finish with slant hem.
- Prepare puff sleeve: Make two rows of ease stitches at upper sleeve shape, 1st at a distance 0.5cm, 2nd at a distance of 0.75cm. Start stitches 5-6cm from raw edge and stop also 5-6cm before the other edge. Leave long threads. (Fig 4)
- Stitch sleeve side seam (1cm seam allowance). Pin the centre of sleeve crown on shoulder, with right sides together and leaving seam allowance.

Fig 4



CAP138H4

Note: Take care that front sleeve and front bodice match

- Gather on sleeve crown 3cm (Ch/12 - 1cm) on both sides of shoulder seam while pulling the long thread ends from both sides.
- Pull until the girth of sleeve is equal with the girth of armhole. Baste sleeve to bodice arm hole, then stitch with machine.
- Attach 4 press buttons at the back opening on marks.
- Finish and press.
- Attach bias strip at bottom of jangia for facing. (See Ex. No.19)
- Join front and back sides with plain seam, leaving 2cm for casing at one side for elastic insertion. (See Ex. No.22)
- Turn the elastic facing to wrong side at waist keeping 0.5cm for first fold and 1.5cm for 2nd fold, baste and finish with seam.
- Insert elastic with the help of safety pin through casing and join for gathers with lapped seam by machine.
- Finish and press.

Skill sequence

Smocking

Objectives: At the end of this exercise you shall be able to

- **prepare smocking at yoke and at sleeve bottom.**

Fabric for smocking requires 2.5 to 3 times the width of cloth compared to the ready measurement of smocked part.

Cut a strip of graph paper for the skirt top of yoke frock front. Take 6cm for ready smocking and 1cm on each side, i.e. total 8cm lengthwise.

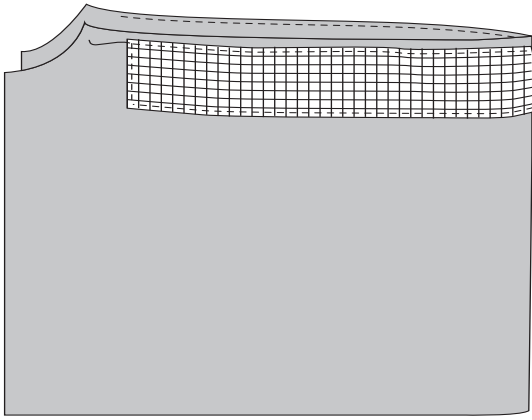
Press the material of frock nicely so that no wrinkles are left out.

Fix the graph strip by basting all round on the upper part of skirt. The lines of graph paper have to be exactly on the rain. (Fig 1)

Secure thread end with a knot. Prepare running stitch lines at the distance of 2 blocks lengthwise, complete 6cm lengthwise. (Fig 2)

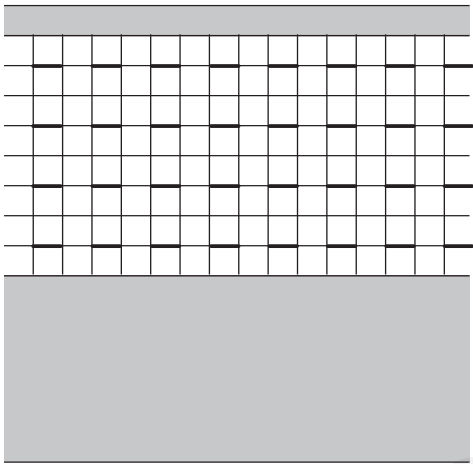
Remove the graph paper carefully by hand so that the thread does not come. (Fig 3)

Fig 1



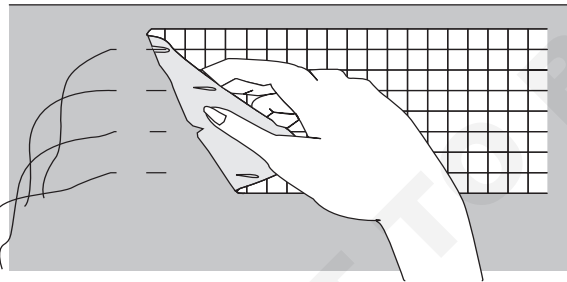
CAP139J1

Fig 2



CAP139J2

Fig 3



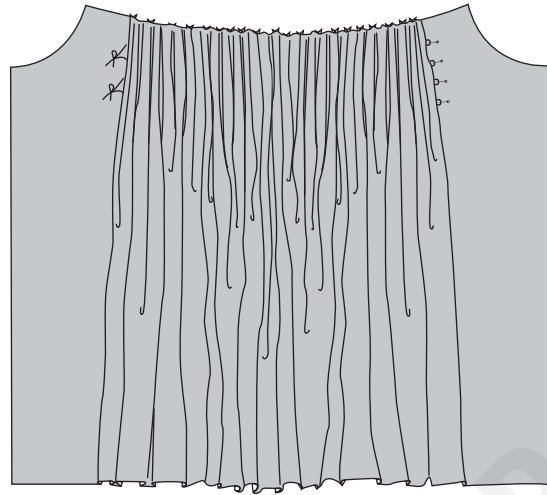
CAP139J3

Pull the thread of two lines together. Anchor the threads at one end securely and distribute the fullness evenly pull other threads also pair wise. (Fig 4)

Start smocking stitch (cable stitch) with a double embroidery skeins thread in needle. Bring the needle from underside through 1st running stitch hole keeping the thread above the needle. Take a short stitch through fabric under the 2nd running stitch hole and draw fabric up. (Fig 5)

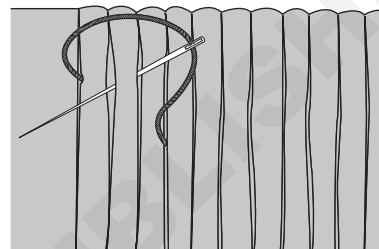
Keep second stitch thread below needle, take a short stitch under 3rd running stitch hole. Draw up fabric to keep folds evenly, always pull thread at right angle to stitch. (Fig 6)

Fig 4



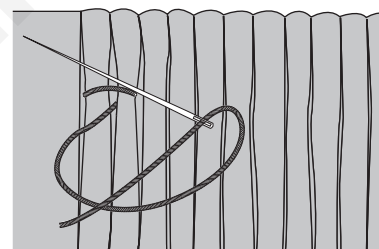
CAP139J4

Fig 5



CAP139J5

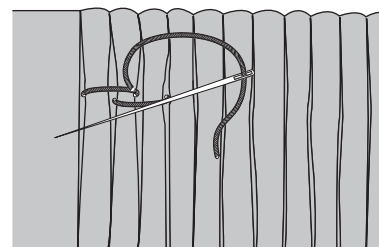
Fig 6



CAP139J6

For next stitch keep thread above needle. Alternate in this way until the row is finished. Try to keep folds even when drawing up stitch. (Fig 7)

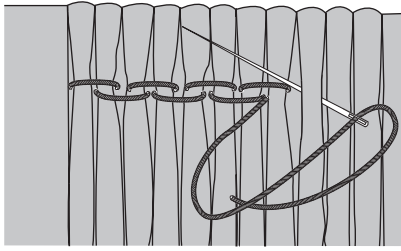
Fig 7



CAP139J7

Repeat the identical procedure for each subsequent row, alternation thread above and below needle in matching pattern block. This will make rows exact duplicates, as this pattern requires. (Fig 8)

Fig 8



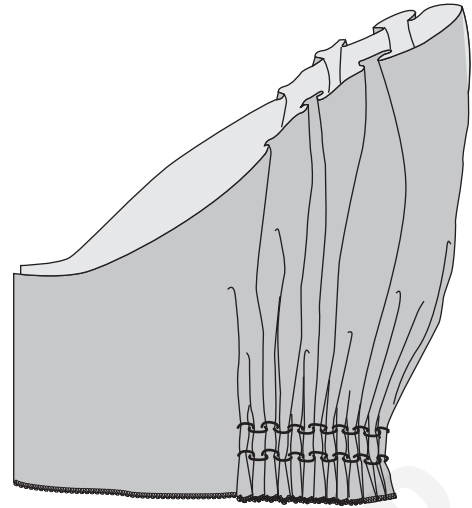
CAP139J8

After completing the smocking remove running stitch.

To smock the sleeves finish the bottom edge with rolled hem.

Leave 1.5 cm after the rolled hem and adopt the above smocking procedure, make the design 10cm in the centre of sleeve widthwise, make two rows of cable stitch remove the running stitch thread. (Fig 9)

Fig 9



CAP139J9

Neck finish with bias binding

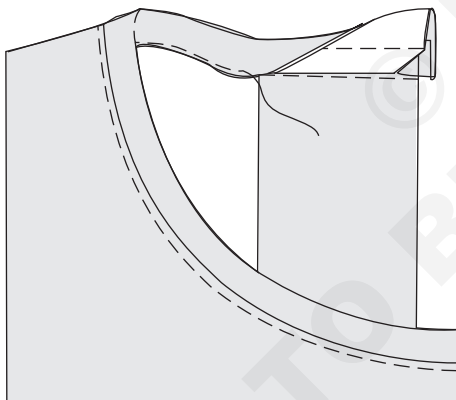
Objective: This shall help you to

- finish the neck with bias binding.

Prepare bias strip of 3cm width.

Place bias strip on neckline with right sides of fabric together, stitch from wrong side along the neckline leaving 0.75cm seam allowance.(Fig 1)

Fig 1



MGACOHHD

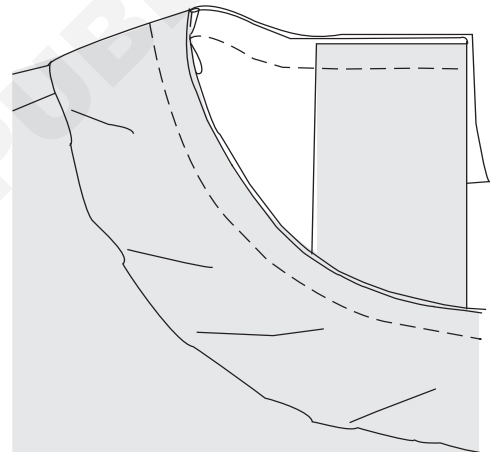
Note: Bias strip has to be stretched while stitching to neck shape

Fold seam allowance towards strip. Fold raw edge to seam line. (i.e. fold strip neatly in centre) and again fold folded edge to then it overlaps the seam line. Baste.(Fig 2)

Stitch from right side close (but not through) the bias strip catching from underside.(Fig 3)

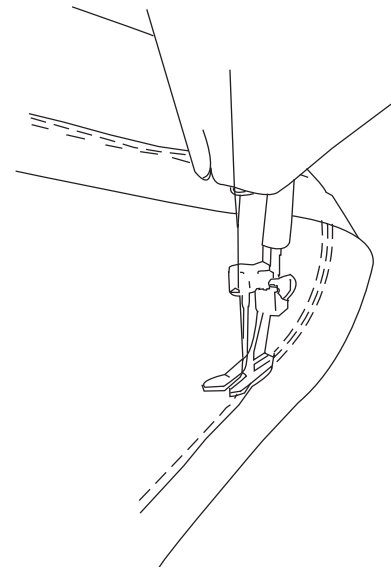
Similarly finish the armhole with bias binding.

Fig 2



MGACOHHC

Fig 3



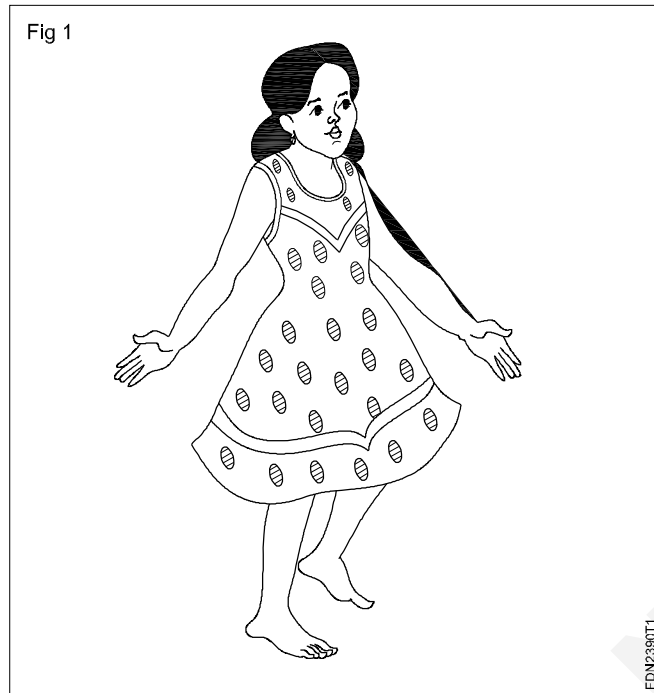
MGACOHHE

A line frock

- 1 Take the following measurements for drafting an A-Line frock from the measurement chart.

Measurement

Length = 56cm
Chest = 56cm
Shoulder width = 23 cm



Drafting details

0 is starting point

Front Panel (part)

0-1 = Full length + 1.5cm

0-2 = $\frac{\text{Chest}}{4} + 4 \text{ cm}$

0-3 = $\frac{\text{Chest}}{4} + 1.5 \text{ cm}$

0-4 = Same as 0-3 + 1.5cm Join 4 & 3 Neck round

0-5 = Square down from 5 to 6

5-7 = 1.5cm Join 3-7

$$1-8 = \frac{\frac{\text{Chest}}{4} - 1 \text{ cm}}{2} + 1 \text{ cm}$$

6-9 = 2.5cm Shape scye 7-9-8

2-10 = Same as 1-8 + 4cm

Join 8-10

10-11 = 1.5 cm Shape bottom 2-11 as shown in Fig 2

Back Part

0-12 = 2cm Shape back neck 3-12 and Back scye 7,8 with help of round curve.

Length (placket) opening at centre

Back $\frac{1}{6}$ th chest from 12 or full opening from 12-2

Instructions for master pattern

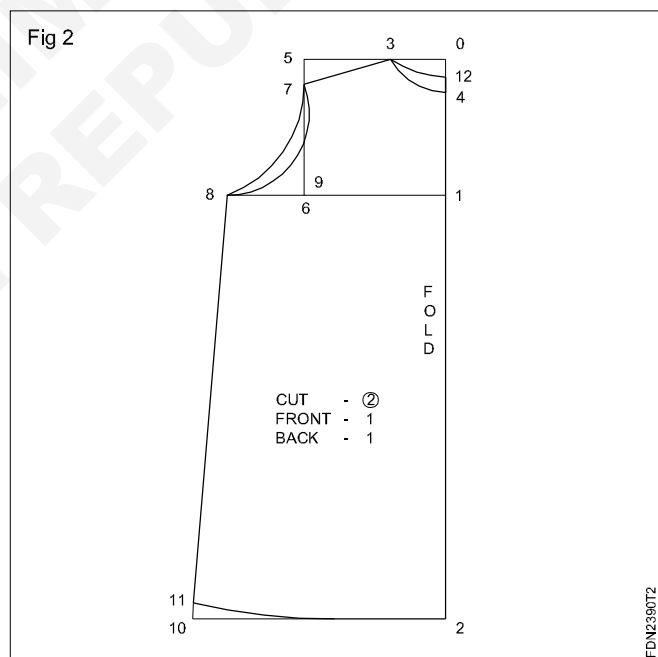
Bodice

Shoulder = 1cm

Neck, armhole = 0.75cm

Side seam = 2.5cm

Bottom turning = 4 cm

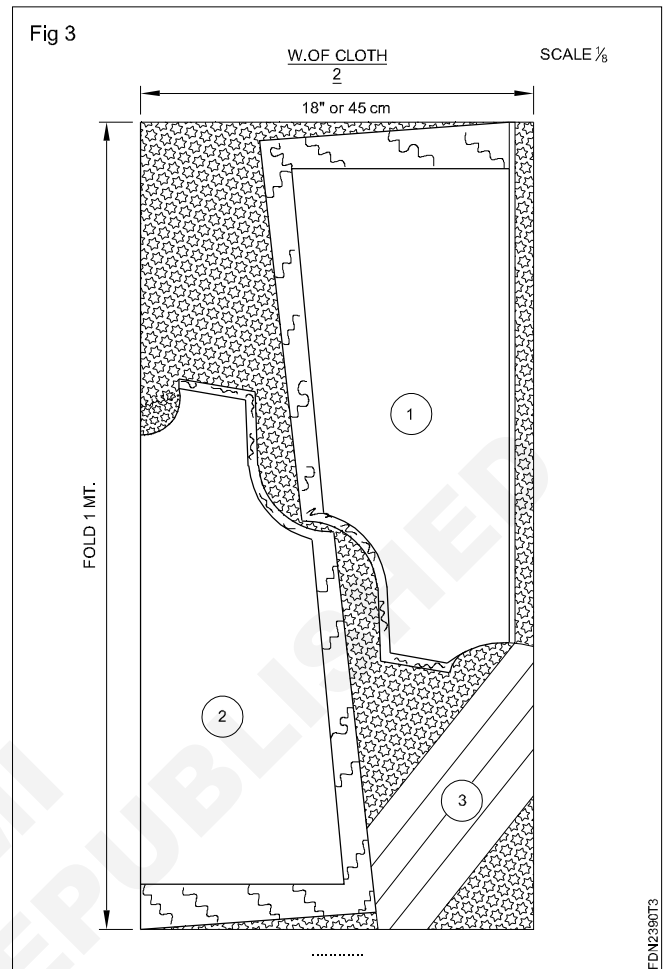


TASK 1: Layout and cutting

Lay the fabric on the cutting table with its right side facing.
Fold the fabric width wise so that the wrong side of fabric face upwards.

Spread and arrange master pattern of A-line frock economically on the fabric. (Fig 3)

Mark the outline with marking chalk.



TASK 2 :Stitch sequence

Join both shoulder of front & back part on the wrong side with right sides facing together.

Finish the back (placket) opening with slit placket (opening)

Finish. (S.S.No.7)

Stitch both the side seams with plain seam.

Make two rows of stitches at side seams for strengthening.

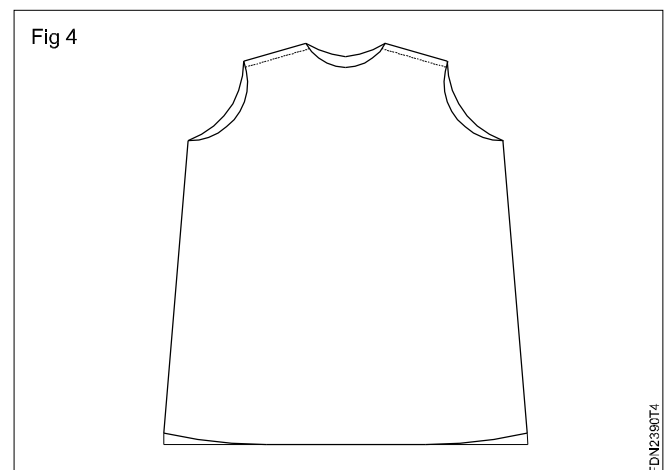
Fold the bottom hem line and stitch with plain seam.

Fix Velcro at the back of placket opening at equal intervals.

Trim the extra threads.

Press and fold the A-line frock.

Get the work checked by your instructor.



Identify and draw different types of lines

Objectives: At the end of this exercise you shall be able to

- identify the tools for drawing
- practice basic drawing
- identify the direction of line draw in the given column
- draw horizontal, vertical lines.

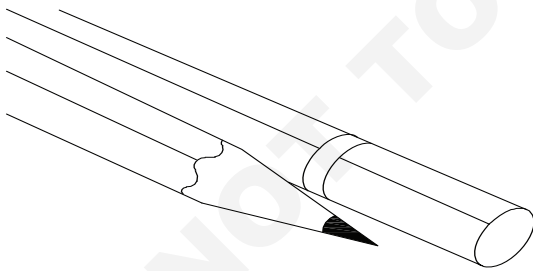

Requirements			
Tools/Instruments			
• Pencils	- 4 Nos.	• Poster paints	- 1 No.
• Charcoal Pencil	- 1 No.	• Water	- as reqd.
• Ruler	- 1 No.	• Pallet	- 1 No.
• Eraser	- 1 No.	• Paper	- as reqd.
• Sharpener	- 1 No.	• Chart	- as reqd.
• Brushes (0,1,3,6,8,10)	- 1 each.	• Magazines	- as reqd.
Materials		• Gum paste	- as reqd.
• Color pencil (24 colors)	- 1 set.	• Water tube	- 1 No.
• Crayons	- 1 set.	• Waste cloth	- as reqd.

The instructor shall arrange of the necessary wall charts/tools/equipment etc., from other sections/ department and also arrange for the required materials to enable the trainees to practice the task effective.

PROCEDURE



TASK 1 : Identify the tools for Drawing & Painting

Identify the tools for Drawing & Painting tools and practice the same.

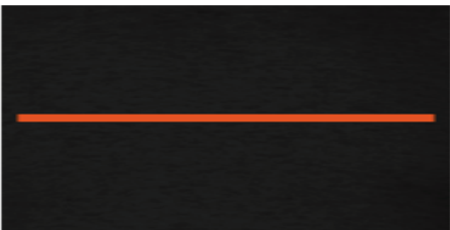

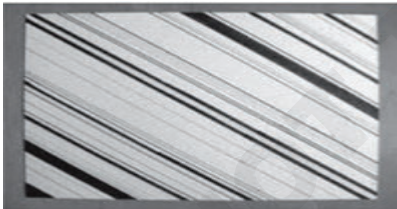
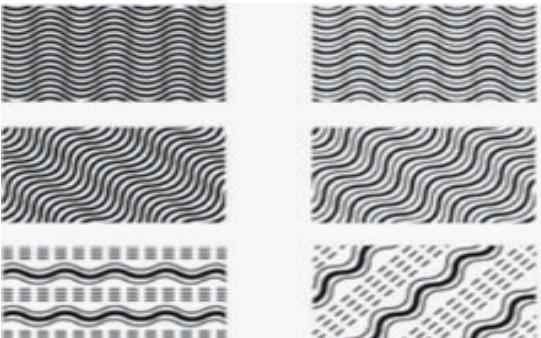
Types of tool	
1 Pencil 	
2 Charcoal Pencil 	

Types of tool	
<p>3 Ruler</p> 	
<p>4 Poster Paint</p> 	
<p>5 Types of Brushes</p> 	
<p>6 Palette</p> 	
<p>7 Drawing board</p> 	

TASK 2: Identify the basic lines & practice

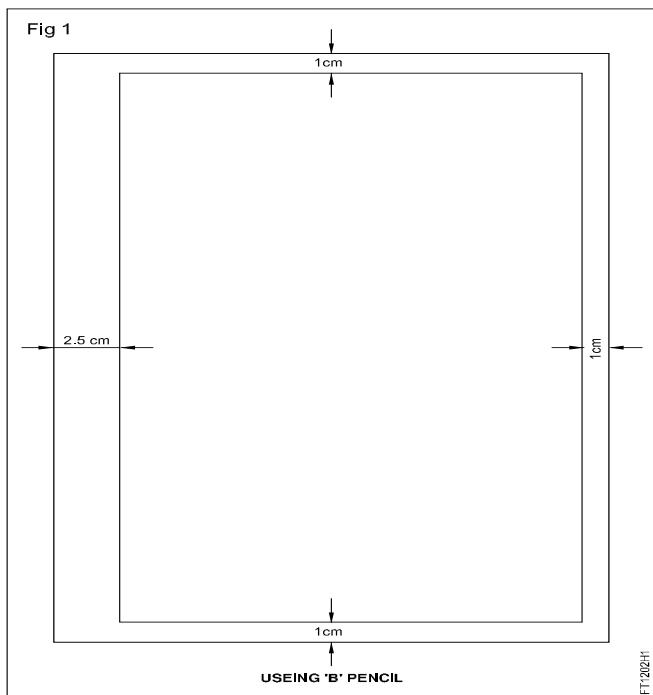
Sl.No.	
1	
2	

TASK 3: Identify the direction of line & draw in the given column

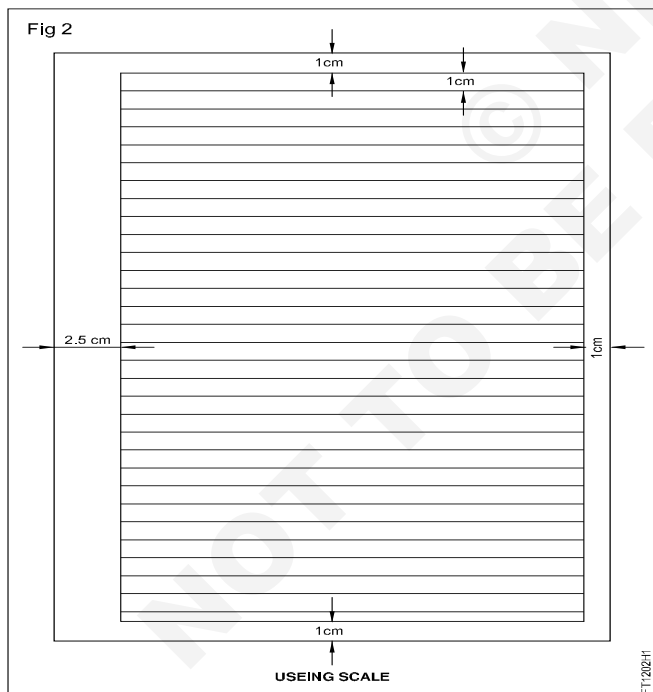
1 Direction of line	
Horizontal line (Fig 1) 	
Vertical line (Fig 2) 	
Diagonal Line (Fig 3) 	
Curve Line (Fig 4) 	

TASK 4: Draw horizontal lines with B, 2B, 4B, 6B pencils

- 1 Draw 2.5cm border on one side & on 3 sides on the A4 sheet using 'B' pencil. as shown in (Fig 1)

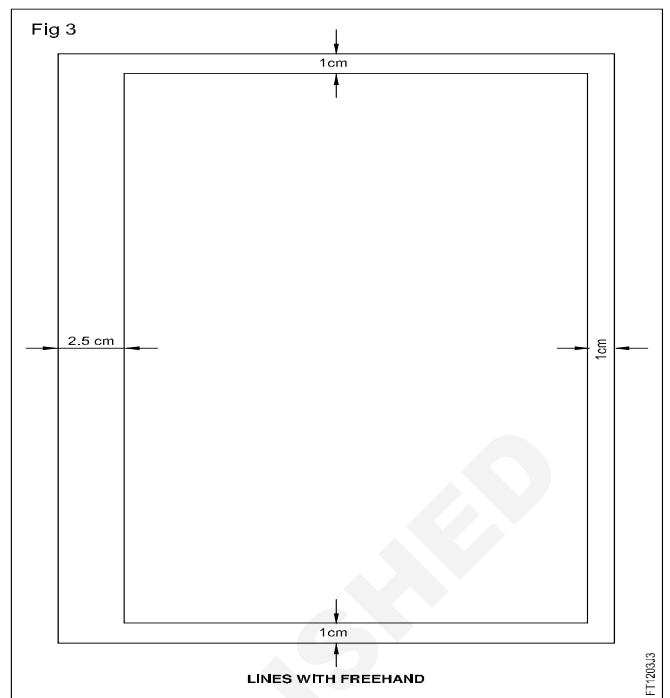


- 2 Draw thin lines horizontally in the box with 1cm distance in between using scale. as shown in (Fig 2)

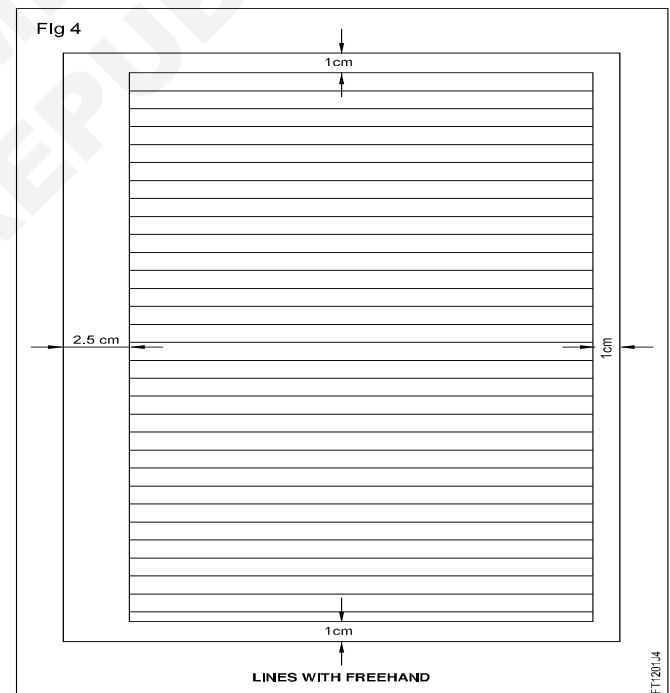


Give less pressure on the pencil.

- 3 Take another sheet to draw thick lines using the same 'B' pencil.
- 4 Draw border as shown in 1st step of task-1- as show in (Fig 3)



- 5 Draw thick horizontal lines in the box with 1 cm distance in between as show in (Fig 4)

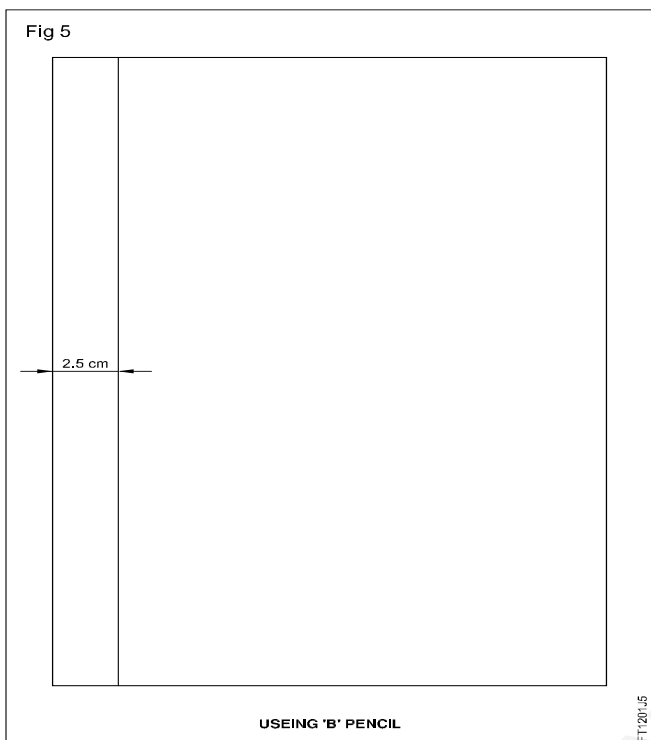


Give more pressure on the pencil.

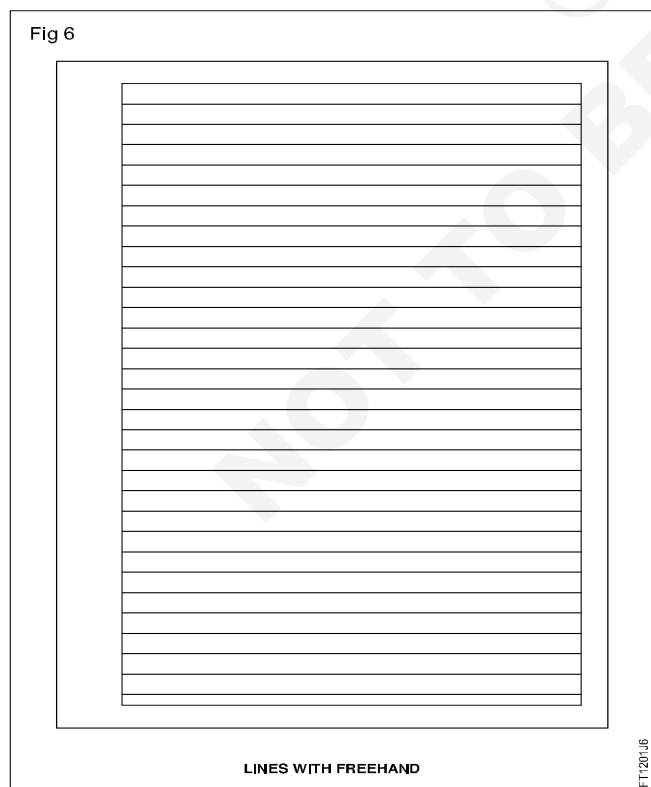
TASK 5: Draw a lines on paper with pencils

Lines with freehand

- 1 Draw 2.5cm border on one side using scale as shown in (Fig 5)

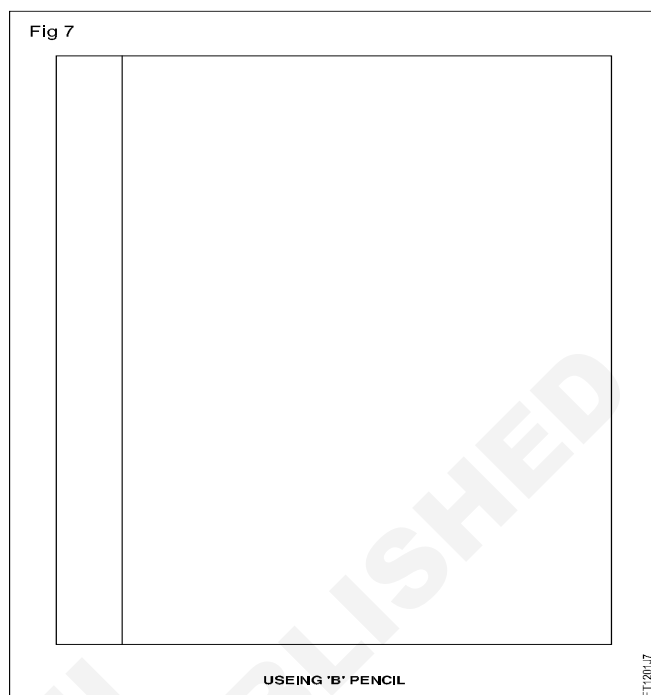


- 2 Draw thin lines starting from the border till the end of the sheet with approximately 1cm distance lines as sown in (Fig 6)

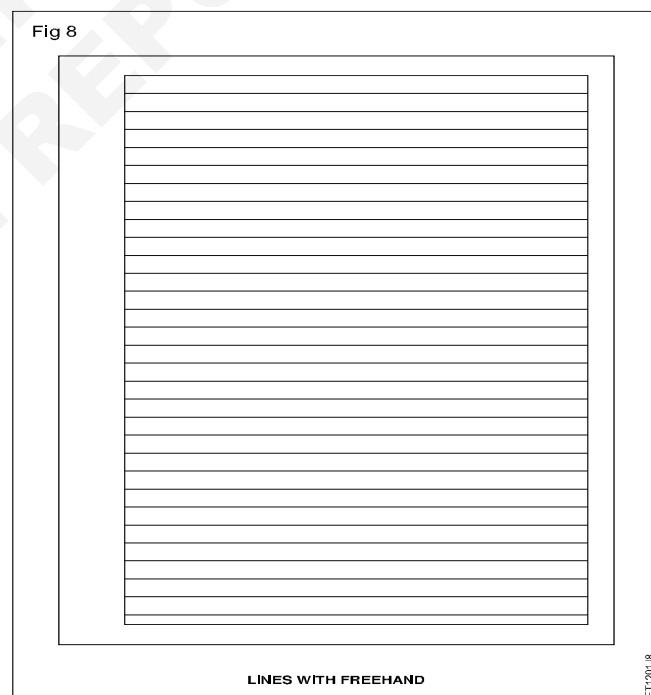


Give less pressure on the pencil.

- 3 Draw border on the another A4 sheet following the procedure 2-set 1 as shown in the (Fig 7)



- 4 Draw thick horizontally starting from the border till the end of the sheet as shown in (Fig 8)

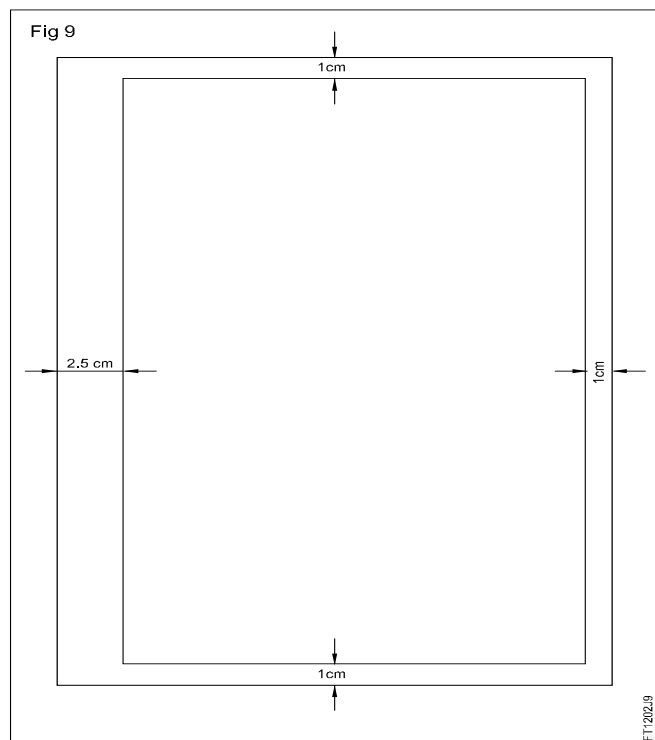


Give more pressure on the pencil.

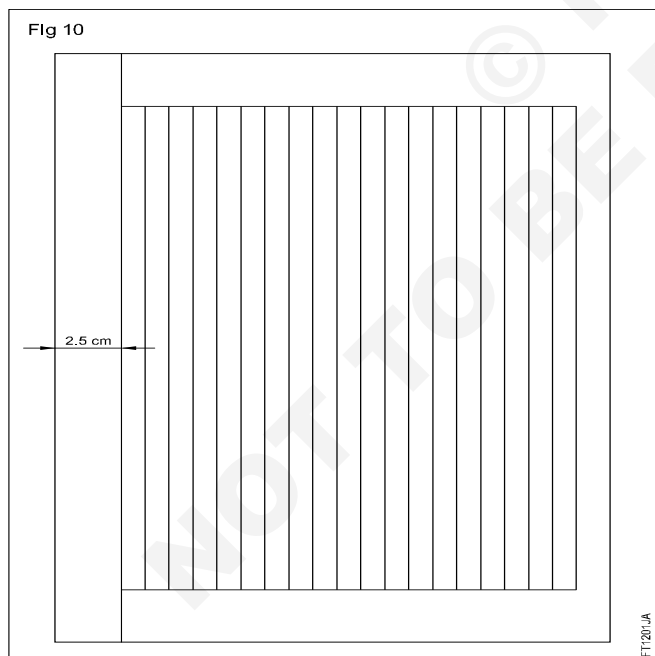
Follow the above mentioned 1 & 2 for thick & thin with 2B, 4B, 6B pencils.

TASK 6: Draw vertical line with scale & B pencil

- 1 Draw 2.5cm border one side & 1cm on the 3 sides in A4 sheet using 'B' pencil as shown in (Fig 9)

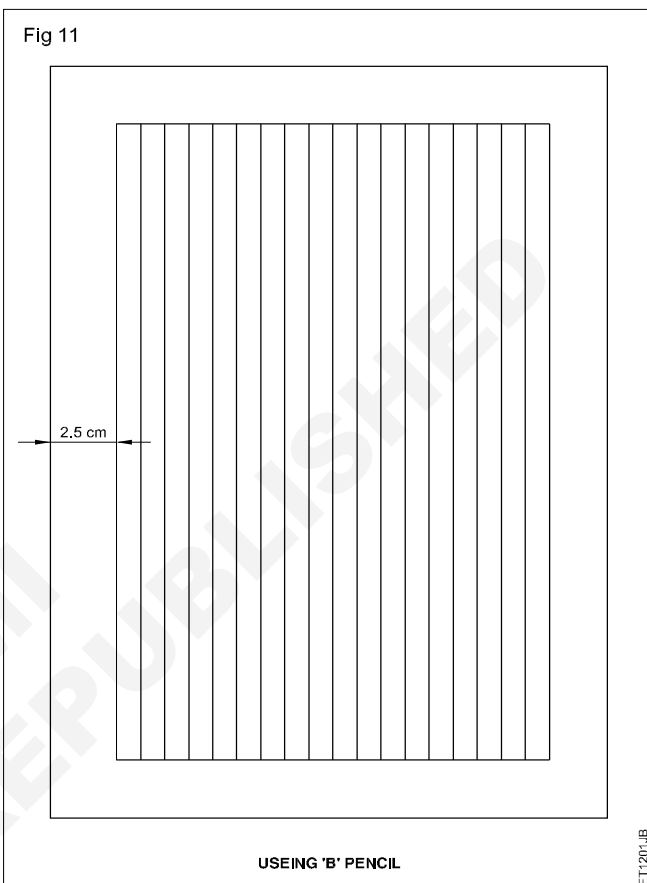


- 2 Draw thin vertical lines one end of border to the other end the border leaving 1 cm in between is show in the (Fig 10)



Give less pressure pencil.

- 3 Draw 2.5 cm border on one place and 1cm on 3 sides in a A4 sheet using 'B' pencil and draw thick vertical lines as shown in fig 10,11 leaving 1cm in between.

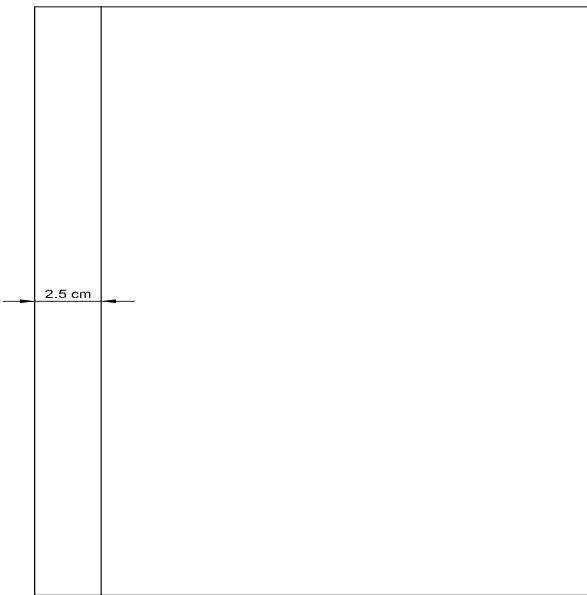


TASK 7: Draw vertical lines with free hand

- 1 Draw 2.5cm border on one side by using scale as shown in Fig 12
- 2 Draw thin vertical lines from one end of the sheet till the end leaving 1cm between as shown in Fig 13

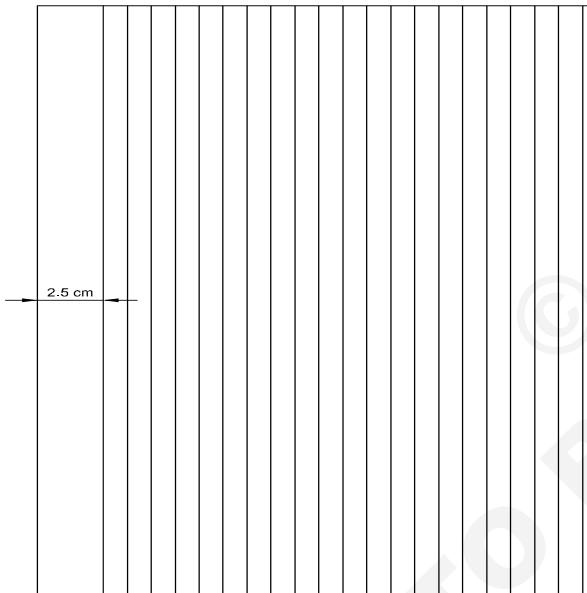
Give less pressure on the pencil.

Fig 12



FT1202/C

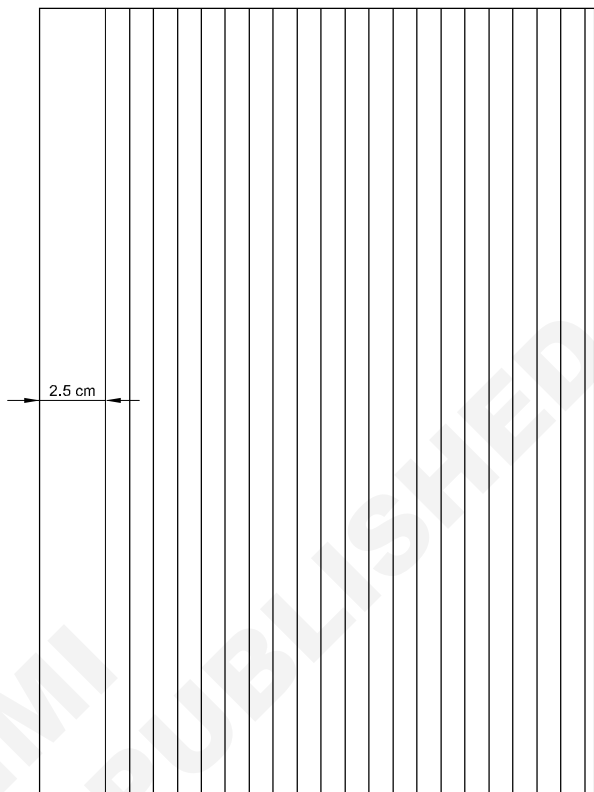
Fig 13



FT1201/D

- 3 Draw 2.5cm border on one side using scale & draw thick vertical lines from one end to another leaving 1cm in between as shown in Fig 14

Fig 14



FT1201/E

Follow the same procedure in task 2 to do thin & thick using 2B, 4B & 6B pencils.

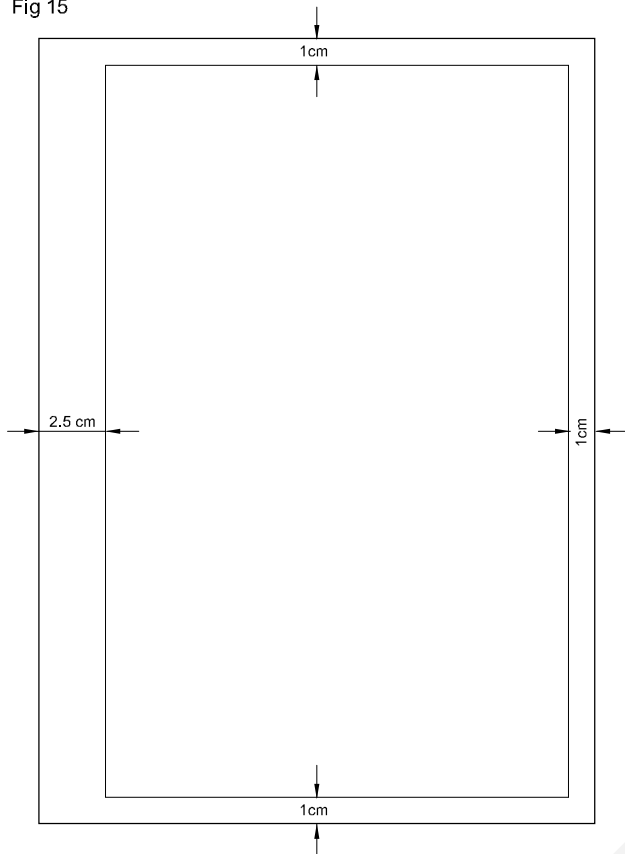
TASK 8: Draw a diagonal lines with B,2B, 4B, 6B pencils

Draw diagonal lines with scale & 'B' pencil.

- 1 Draw 2.5cm on one lines & 1cm on 3 sides using scale & 'B' on an A4 sheet as shown in Fig 15.
- 2 Draw thin diagonal lines from left. Top corner till right bottom corner leaving 1cm in distance as shown in Fig 16.

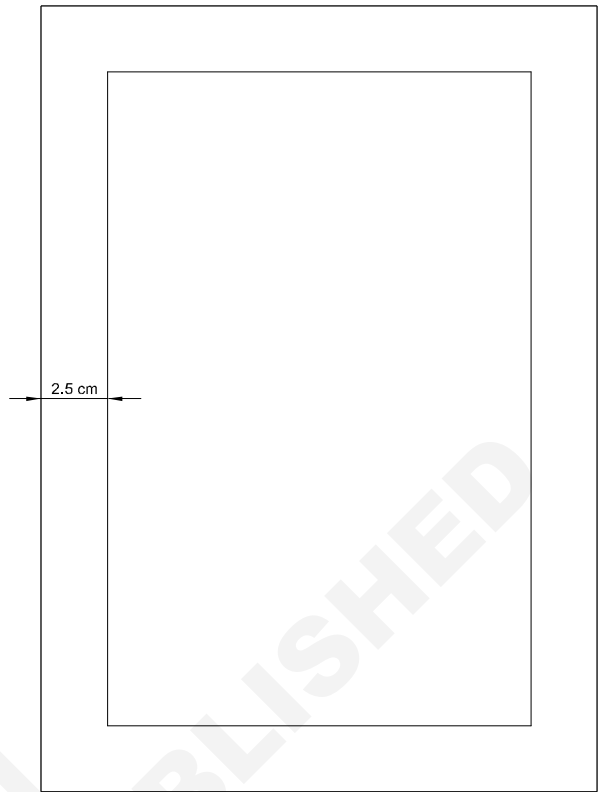
- 3 Draw 2.5cm on one side 1cm on 3 sides of A4 sheet using scale as shown in Fig 17.
- 4 Draw thick diagonal lines from top left corner till right bottom corner leaving 1cm distance in between as shown in Fig 18.

Fig 15



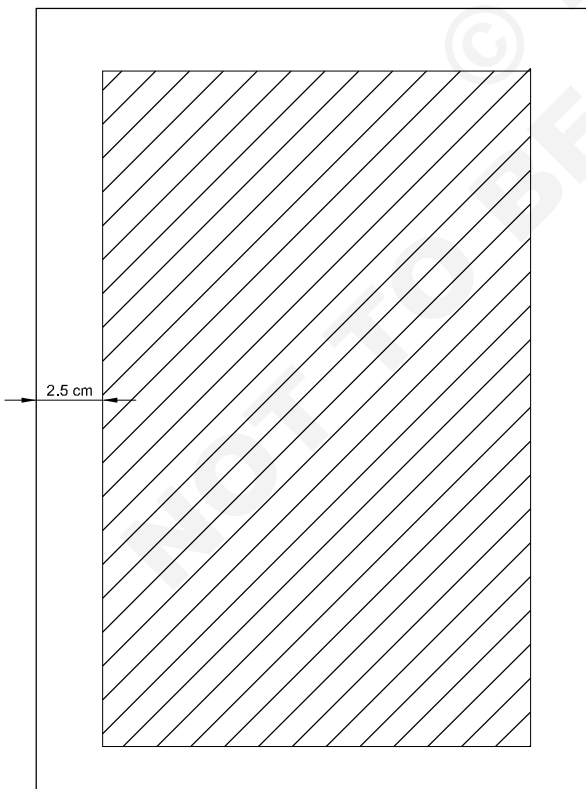
FT1202JF

Fig 17



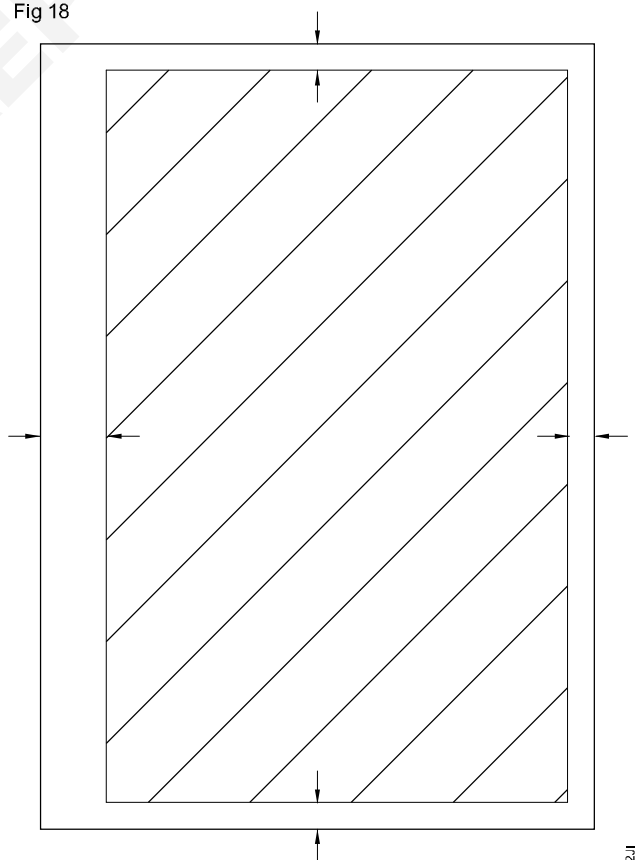
FT1201JH

Fig 16



FT1201JG

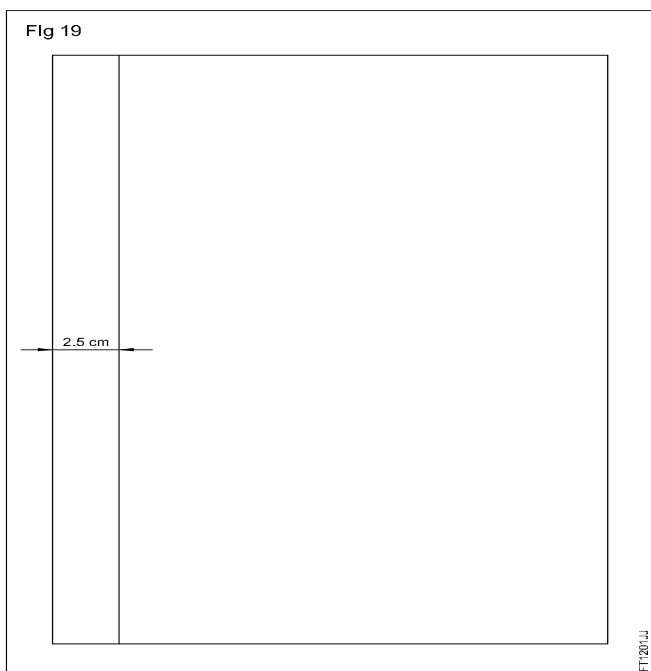
Fig 18



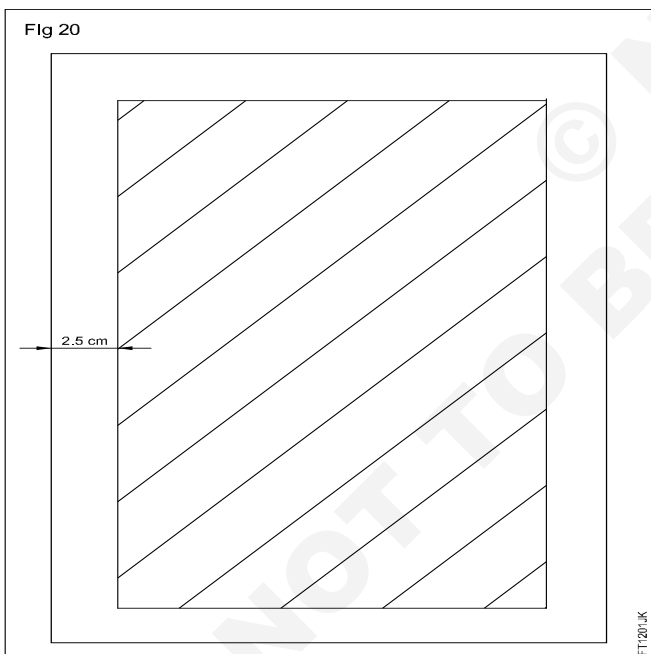
FT1202JJ

TASK 9: Draw diagonal lines with free hand

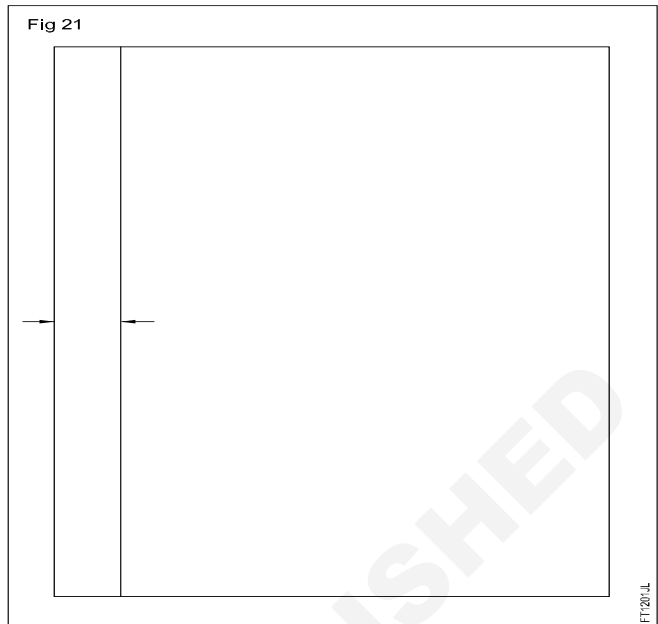
- 1 Draw 2.5 border on one side using scale on A4 sheet as shown in Fig 19.



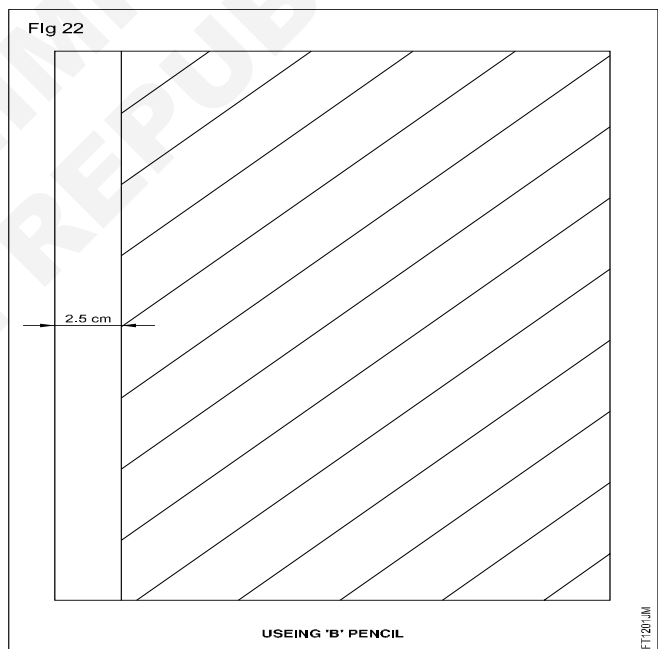
- 2 Draw thin diagonal lines from top left corner till right bottom corner leaving 1cm in distance as shown in Fig 20.



- 3 Draw 2.5cm border on one using scale as shown in Fig 21.



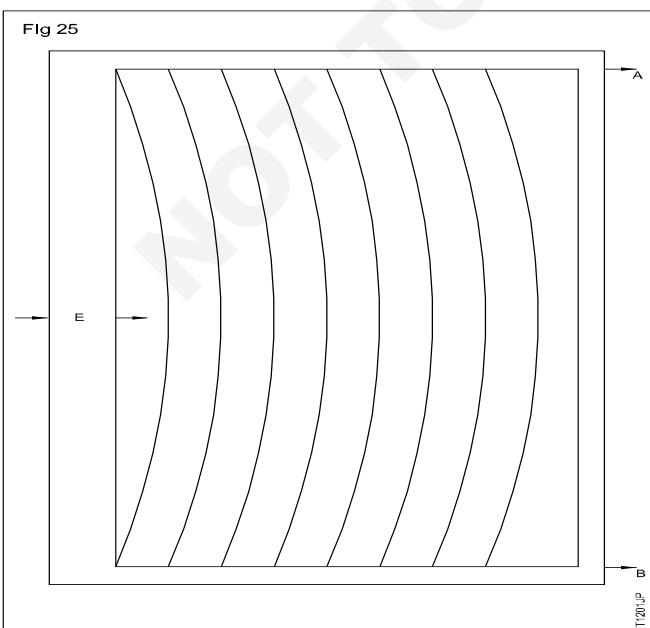
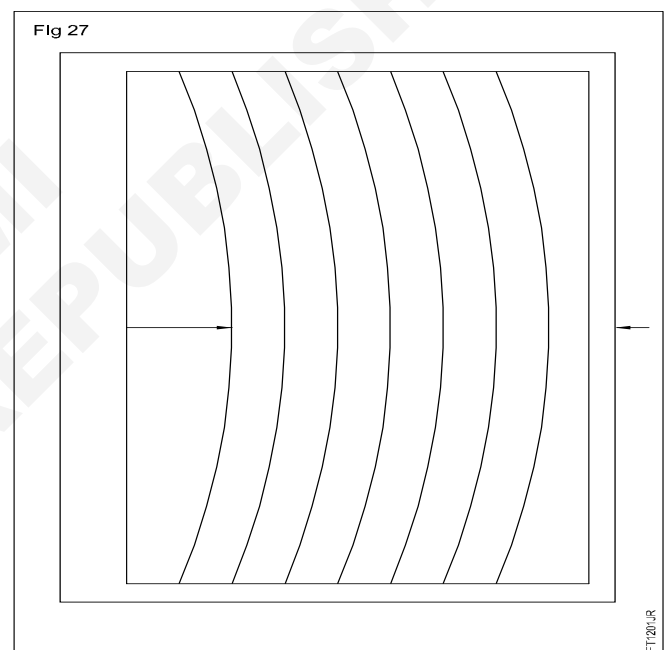
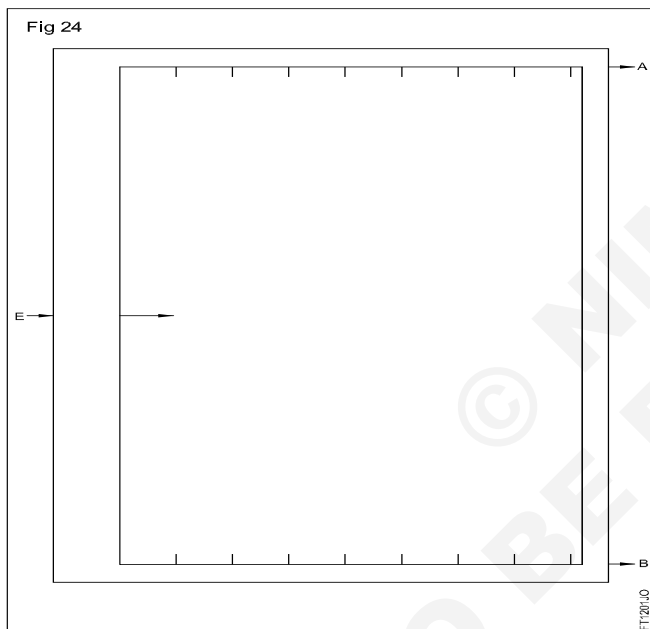
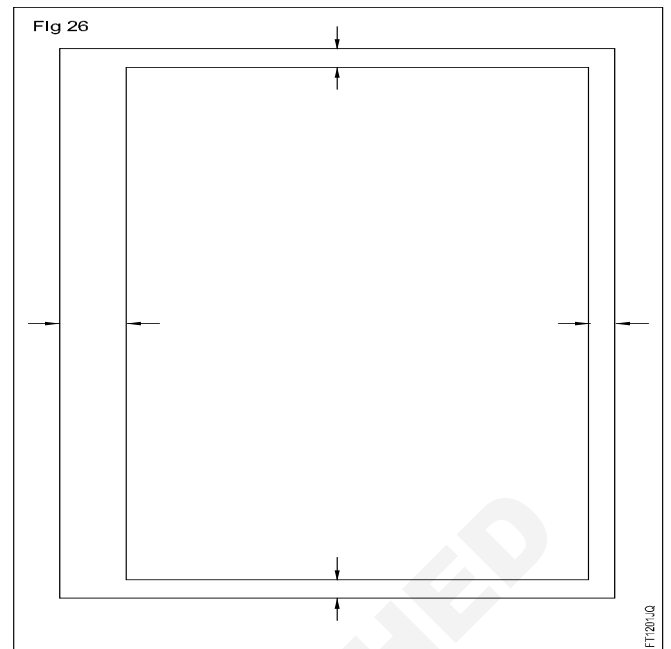
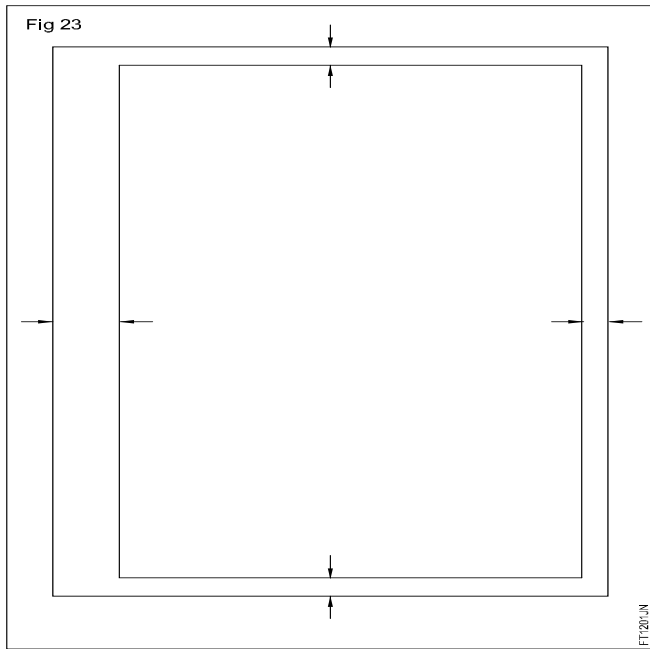
- 4 Draw thick diagonal lines top left corner till right bottom liner living 1cm in distance as shown in Fig 22.



Follow the same procedures of task 3 to do thin & thick lines using 2B, 4B, & 6B pencils.

TASK 10: Draw curve lines with B, 2B, 4B, 6B

- 1 Draw curve lines with scale & 'B' pencil.
- 2 Draw 2.5cm on one side & 1cm on 3 sides using scale on A4 sheet as shown in Fig 23.
- 3 Mark 1cm distance line on top & bottom line (A&B)
- 4 Fold the sheet into two & mark center point at (c) for 2cm as show in the Fig 24.
- 5 Join the marked dots curve using French curve to get curve lines giving less pressure on pencil. as shown in Fig 25.
- 6 Draw 2.5cm on side & 1cm on 3 sides on 4 sheet using scale as shown in the Fig 26.
- 7 Mark 1cm in the top line (4) & 1cm on bottom line (B).



- 8 Fold the sheet into two & mark the center point (c) for 2cm as shown in the Fig 24.
- 9 Join the lines using French curve giving for pressure on the pencil. as shown in Fig 28 & 29
- 10 Follow the same procedure for free hand following the Fig 24, 25, 26, 27, 28, 29.

Develop designs with geometrical shapes

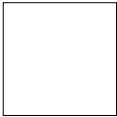
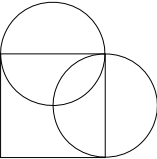
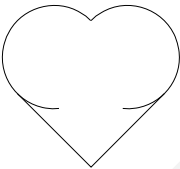

Objectives: At the end of this exercise you shall be able to

- develop designs with geometrical shapes - I
- develop designs with geometrical shapes - II
- develop designs with geometrical shapes - III
- develop designs with geometrical shapes - IV to VIII
- placement of single unit in 2 style.

Requirements			
Tools / Instruments		Materials	
• Plastic scale - 15 cm	- 1 No.	• Cartridge paper of A4 size	- as reqd.
• Painting brush No - 1 & 3	- 1 No.	• Compass	- 1 No.
• Drawing table	- 1 No.	• Pencils(HB,2B to 6B)	- 1 No each.
• Pencil sharper	- 1 No.	• Pencil eraser	- 1 No.
• Palette	- 1 No.	• Poster colors - Yellow, Red & Blue	- 1 No.
		• Cup of water	- 1 No.
		• Waste cloth	- 1 No.

PROCEDURE

TASK 1: Develop designs with geometrical shapes - I

Fig 1		
Fig 2		
Fig 3		
Fig 4		

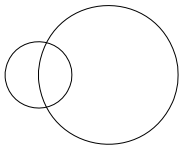
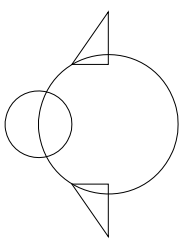
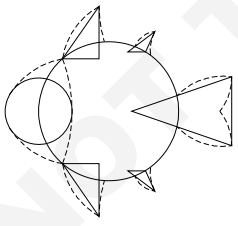
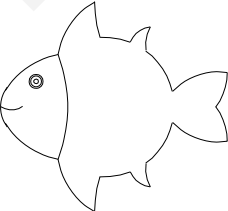
TASK 2: Develop designs with geometrical shapes - II

Fig 1	
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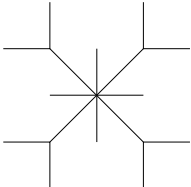
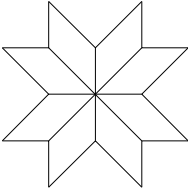
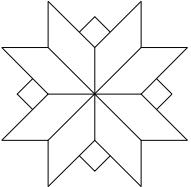
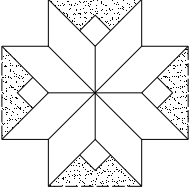
TASK 3: Develop designs with geometrical shapes - IV

Fig 1		
Fig 2		
Fig 3		
Fig 4		

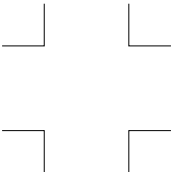
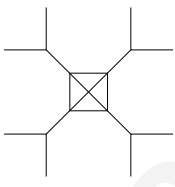
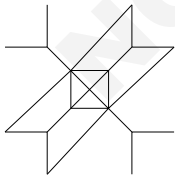
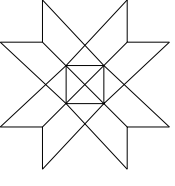
TASK 4: Develop designs with geometrical shapes - V

Fig 1		
Fig 2		
Fig 3		
Fig 4		

TASK 5: Develop designs with geometrical shapes - VI

Fig 1		
Fig 2		
Fig 3		
Fig 4		

TASK 6: Develop designs with geometrical shapes - VII



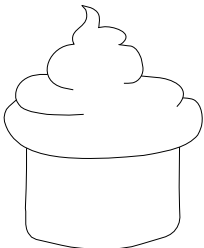
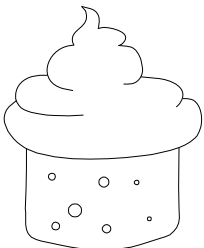
Fig 1		
Fig 2		
Fig 3		
Fig 4		

Develop designs using free hand method

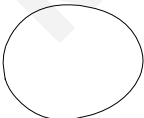
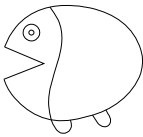
Objectives: At the end of this exercise you shall be able to

- design using free hand method - I
- design using free hand method - II
- design using free hand method - III
- design using free hand method - IV
- design using free hand method - V
- design using free hand method - VI
- design using free hand method - VII
- design using free hand method - VIII.

TASK 1: Develop designs with freehand shapes - I

Fig 1 	
Fig 2 	
Fig 3 	
Fig 4 	

TASK 2: Develop designs with freehand shapes - II

Fig 1 	
Fig 2 	

Make a color wheel and color schemes

Objectives: At the end of this exercise you shall be able to

- practice brushes and strokes
- make a color wheel
- color strokes on paper
- create shades of colour
- create tones of colour
- identify & Marking of color
- draw a color wheel
- paint the color wheel
- illustrate color relationship.

Requirements

Tools/ Instruments

- Plastic scale - 15cm - 1 No.
- Painting brush no 1 and 3 - 1 No each.
- Drawing table - 1 No.
- Pencil sharper - 1 No.
- Palette - 1 No.

Materials

- Cartridge paper of A4 size - as reqd.
- Compass - 1 No.
- Pencils(HB,2B to 6B) - 1 No each.
- Pencil eraser - 1 No.
- Poster colors - yellow, red and blue
- Cup of water - 1 No.
- waste cloth - as reqd.

TASK 1: Practice - Brush

Brushes and strokes



Round:

This is a #6 round sable in this example. Used for tapered lines, details and dots.

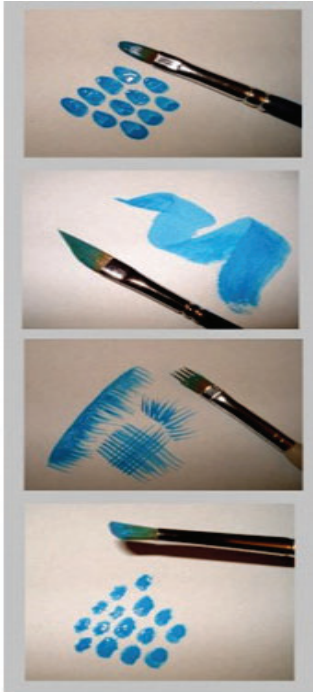


Flat or square sometimes called a shader. Handy for dry blending, square shapes and edges.



Filbert:

Petals, rounded strokes and blending.



Cat's tongue (a Filbert with a longer loofs or hairs).
Nice for petals and scales, also offers good control for eyeliner.

Dagger:
Good for long varied strokes like ribbons swirls. Can do very fine lines and marbling.

Rake or comb:
Great for fur, drag blending for uneven effects and textures.

Deer foot:
Stippling, texture, fur, uniform blotches.

Types of tool

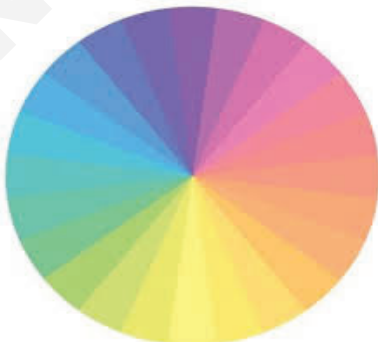
Crayons



Colour Pencils

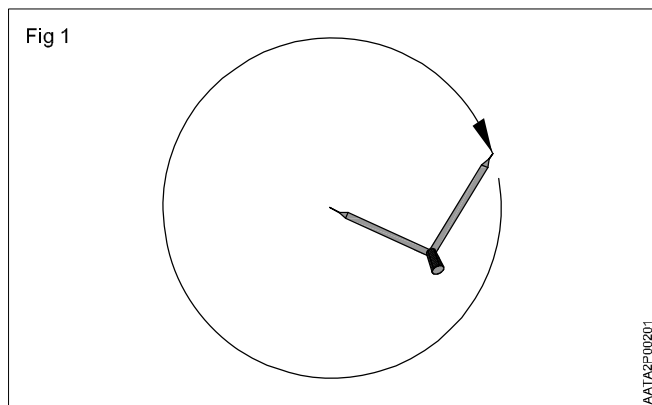


Pastels

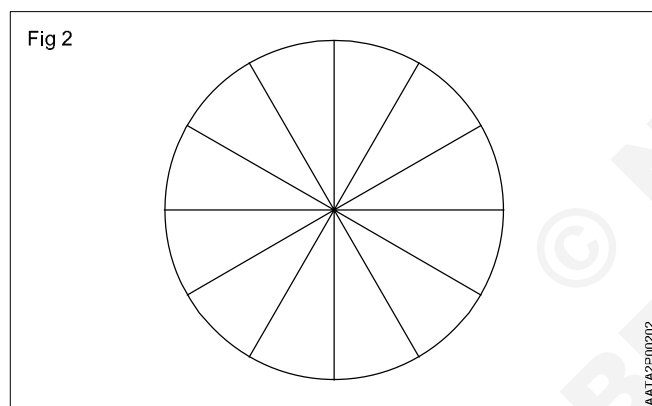


TASK 2: Make a color wheel

- 1 Take the cartridge paper and place it on the drawing table.
- 2 Mark a point at the center of the paper.
- 3 Fix a sharp pointed pencil on the compass
- 4 Draw a circle of 5 cm radius with the marked point as its mid point, using compass and pencil. (Fig 1)



- 5 Divide the circle with straight lines into 12 equal parts from its center point (Fig 2)



- 6 Name each part of the color wheel with its appropriate sequence of colors to be painted in it.

Sequence of Colors in Color Wheel

- 1 Red
- 2 Red orange
- 3 Orange
- 4 Yellow orange
- 5 Yellow
- 6 Yellow green
- 7 Green
- 8 Blue green
- 9 Blue
- 10 Blue violet
- 11 Violet
- 12 Red violet

- 7 Paint the color wheel; with primary colors -yellow, red and blue in suitable parts of the color wheel using a clean painting brush.
- 8 Allow it to dry before proceeding.

TASK 3: Color strokes on paper

- 1 Take A4 sheet one color, brush & cup of water
- 2 Dip the brush in the cup of water & wipe of the excess water in the brush with cloth.
- 3 Mix one colors (Red) with little water on the pallet. (Let the mixture be of medium)
- 4 Start making strokes on the paper using the mixed color from one end to another.
- 5 The same procedure is followed for all the 11 colors . Red orange, orange, yellow orange, yellow, yellow green, blue green, blue, blue violet, violet, red violet.

TASK 4: Practice shades of colors

- 1 Take A4 sheet one color, brush, cup of water & black colors.
- 2 Dip the brush in the cup of water and wipe of the excess water in the brush with cloth.
- 3 Mix one color (one drop) with black (1/2 drop)
- 4 By mixing these two colors we get a dark shade.
- 5 Start making strokes on the paper using this mixture from one end to another.
- 6 The same procedure is followed for all the 11 colors.

TASK 5 : Practice tints of colour

- 1 Take A4 sheet one color, brushes, cup of water & white colour.
- 2 Dip the burst and in the water and wipe of the excess water with cloths.
- 3 mix one colours (one drop) with white (1/2 drop)
- 4 This mixture gives light colour.
- 5 Start making strokes on the paper using this mixture from one end to another.
- 6 The same procedure is followed on with all the 11 colors.

TASK 6: Practice tones of colour

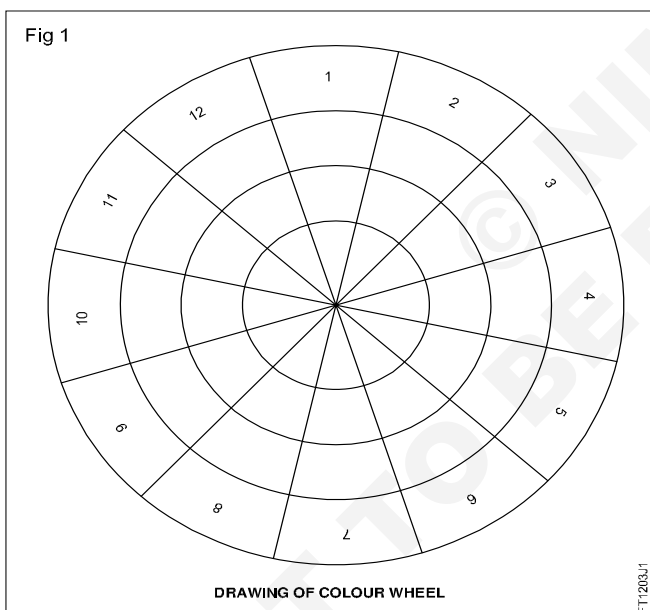
- 1 Follow the procedure of task 1, 2 of the task 3 as previous procedure.
 - 2 Mix one colour with grey with the same proposition followed in procedure 3.
- Follow the procedure according to the task 3 procedure 4, 5, 6.

TASK 7: Identify and marking of colour

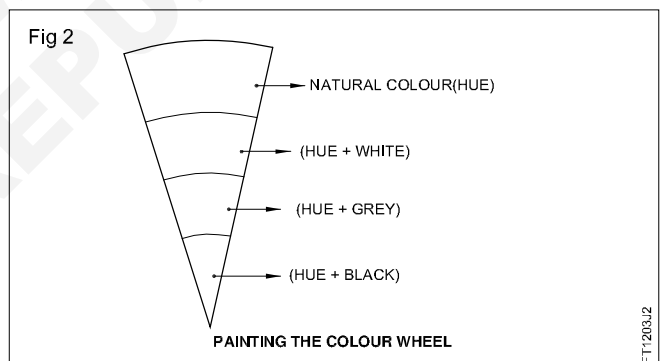
- 1 Mark primary, secondary and tertiary colours from the painted sheets of task 1.

TASK 8: Draw a of colour wheel

- 1 Draw a circle with a radius of 12.5cms.



- 2 Divide the circle into 12 equal parts.
- 3 Divide the circle into 4 equal circles in the big circle.



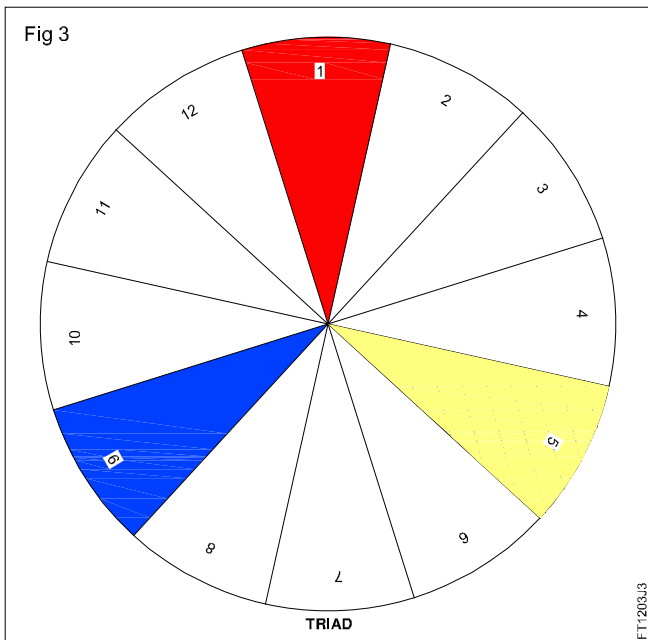
TASK 9: Painting the colour wheel

- 1 Take the draw colour wheel, painted papers.
 - 2 Start painting with natural colours on the first row in order.
 - 3 Paint the second row with tints.
 - 4 Paint the fourth row with shades.
- Colour wheel order**
- 1 Red
 - 2 Red orange
 - 3 Orange
 - 4 Yellow orange
 - 5 Yellow
 - 6 Yellow green
 - 7 Green
 - 8 blue green
 - 9 Blue
 - 10 Blue violet
 - 11 Violet
 - 12 Red violet

TASK 10: Identify illustration of colour relationship

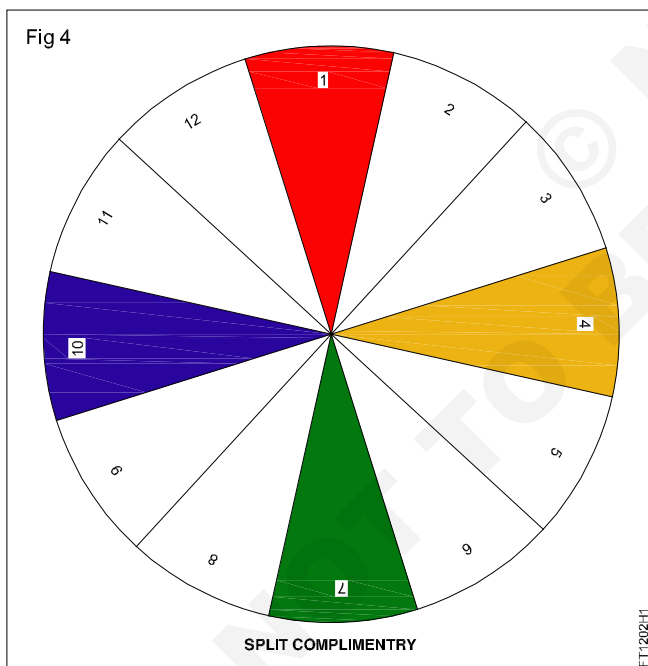
Triad

3 colours equally spaced from each other (Fig 3).



Split complimentary

4 colours equally placed on the colour (Fig 4).



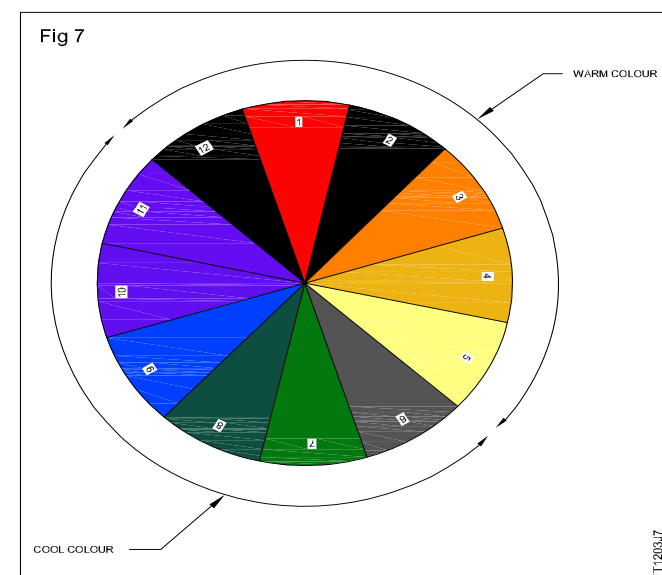
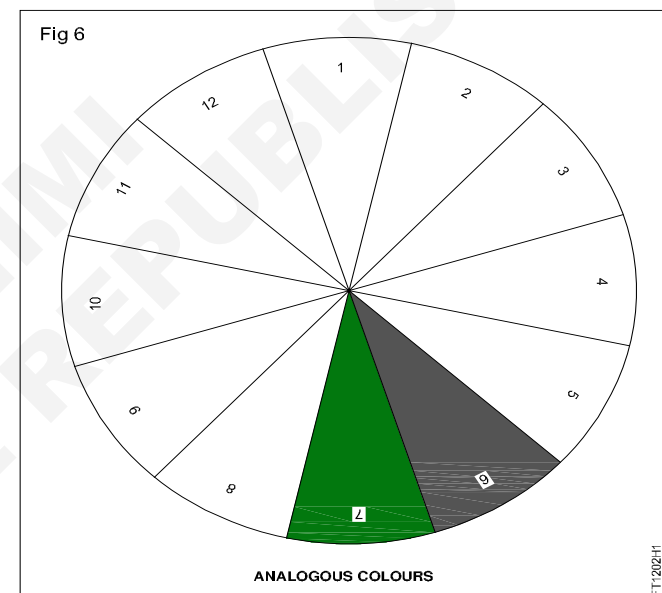
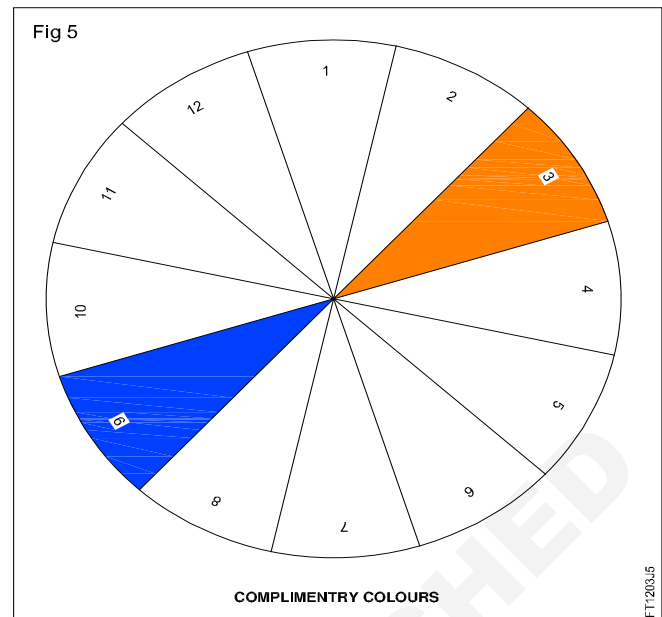
Complementary colours.

Colours directly opposite to each other (Fig 5).

Analogous colour

Neighboring colours on the colour wheel (Fig 6).

Warm and cool colours (Fig 7)



Color a design with color schemes

Objectives : At the end of this exercise you shall be able to

- color a design with different color schemes
- identify the color & repeat in the given column.

Requirement			
Tools/ Instruments		Materials	
• Plastic scale (15 cm)	- 1 No.	• Cartridge paper of A4 size	- as reqd.
• Painting brush No 1 and 3	- 1 No each.	• Poster colors	- White, black, yellow, blue and red
• Palette	- 1 No.	• Pencils (HB, 2B to 6B)	- 1 No each.
• Drawing table	- 1 No.	• Pencil Eraser	- 1 No.
• Pencil sharpener	- 1 No.		

- 1 Trace /draw a design suitable for coloring with various color schemes in 4 A4 papers.

TASK 1: Create natural color scheme

- 1 Mix white and black color together in equal proportions in a palette to get grey color
- 2 Mix white and black colors together in different proportions to get different shades of grey color.
- 3 Color the traced design with various shades of grey color.

— — — — —

TASK 2: Create monochromatic color scheme

- 1 Mix white and red (any color) together in equal proportions in a palette to get lighter shade of red color
- 2 Mix white and red (any color) in different proportions to get various shades of the color
- 3 Color the traced design with various shades of the mixed color.
- 4 Mix black and red (any color) together in equal proportions in a palette to get darker shade of red color.
- 5 Mix black and red (any color) in different proportions to get various shades of the color.
- 6 Color the traced design with various shades of the mixed color.

— — — — —

TASK 3: Create dichromatic color scheme

- 1 Mix any two colors in different proportions to get a newer shade of dichromatic color.
- 2 Color the traced design with the dichromatic color.

— — — — —

TASK 4: Create related color scheme

- 1 Mix any secondary color with any two primary colors or mix one primary color with two secondary colours to get a related color.
- 2 Color the traced design with the related color.

— — — — —

TASK 5: Identify the Colors & repeat in the given column

<p>Colors Fig 1</p> <p>PRIMARY COLORS</p>  <p>SECONDARY COLORS</p> 	
<p>Tertiary colors Fig 2</p> 	
<p>Color wheel Fig 3</p> 	

TASK 6: Identify the Value of the hues/color & repeat in the given column

Value Chart–Light & Darkness of the Color



Light color: Any color mixed with white

Dark Color: Any Color mixed with Black

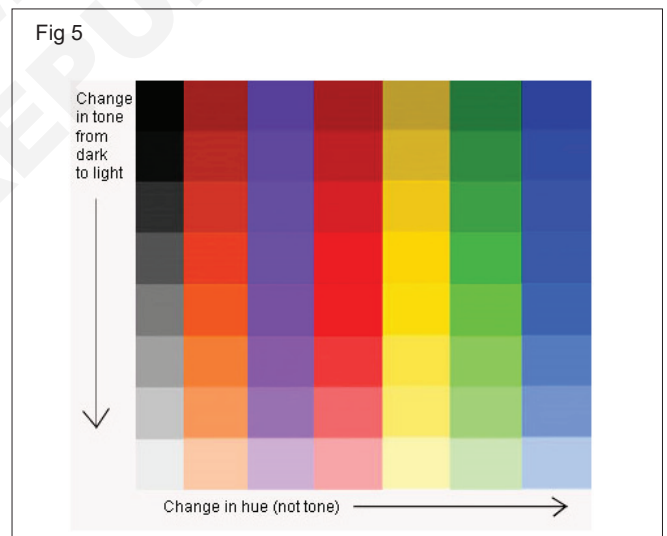
TASK 7: Identify the Intensity of the hues & repeat in the given column

Intensity Chart–Brightness & Dullness of the Color Fig 5.

Bright Color: Any color mixed with white/ Light color

Dull Color: Any color mixed with black/ dark color

Practice the arrival of light and dark tones and hues repeatedly



Sketching of Indian dress and western dress

Objectives: At the end of this exercise you shall be able to

- sketch the different types of saree blouse
- sketch the different types of ladies top
- sketch the different types of gents pyjama
- sketch the different types of gents shirts.

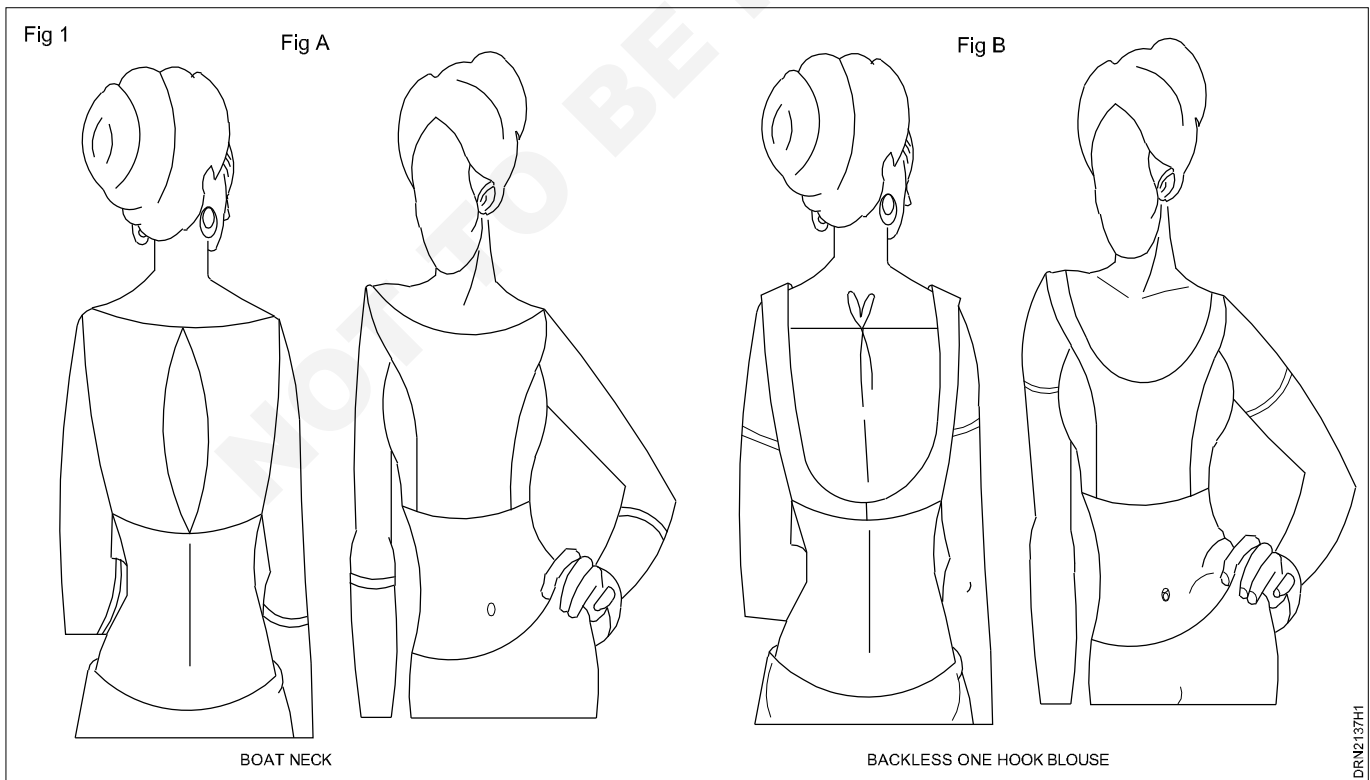
Requirements			
Tools/Instruments			
• Paper scissors medium size	- 1 No.	• 2H pencils	- 1 No.
• Drawing table	- 1 No.	• Pencil eraser	- 1 No.
• Pencil sharpener	- 1 No.	• Black fine liner size 01	- 1 No.
• Palette	- 1 No.	• Round brush 1,3,6 sizes(each 1no.)	- 1 No.
Materials		• Poster colour set	- 1 No.
• Cartridge paper of A3 size	- 1 No.	• Waste cloth	- 1 No.
		• Cup of water	- 1 No.

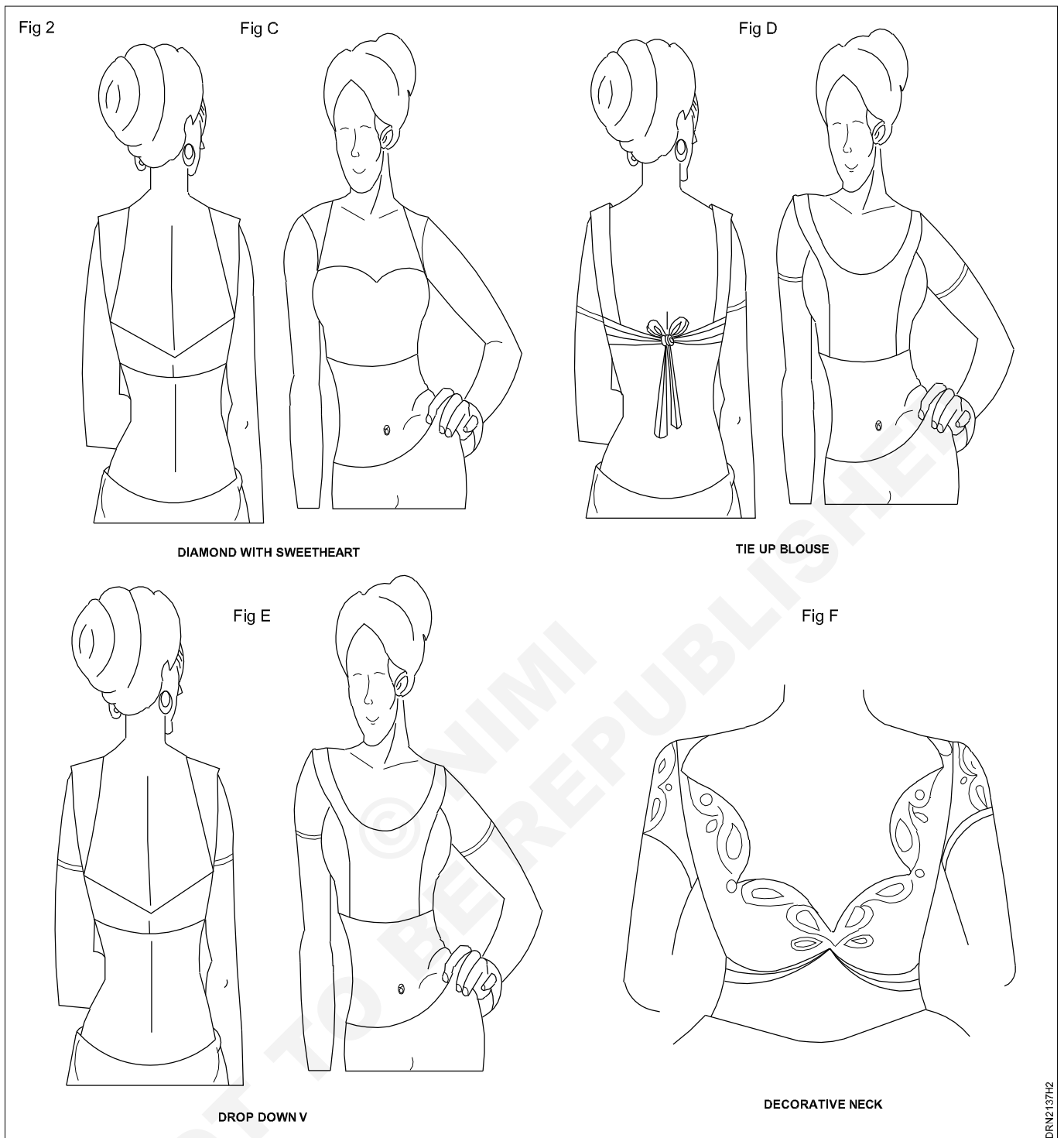
PROCEDURE

TASK 1: Sketch different types of sari blouse

- 1 Sketch the different types of tops given in the following figures(Fig 1-6) using 2H pencil in the cartridge paper.
- 2 Using fine pencil lines for easy corrections.
- 3 Make a necessary corrections after completing the sketches.
- 4 Draw the sketches with black with fine liner.
- 5 Choose suitable colours and apply them as required to get the effect using poster colours and brushes of suitable sizes.

Get the work checked by your instructor.

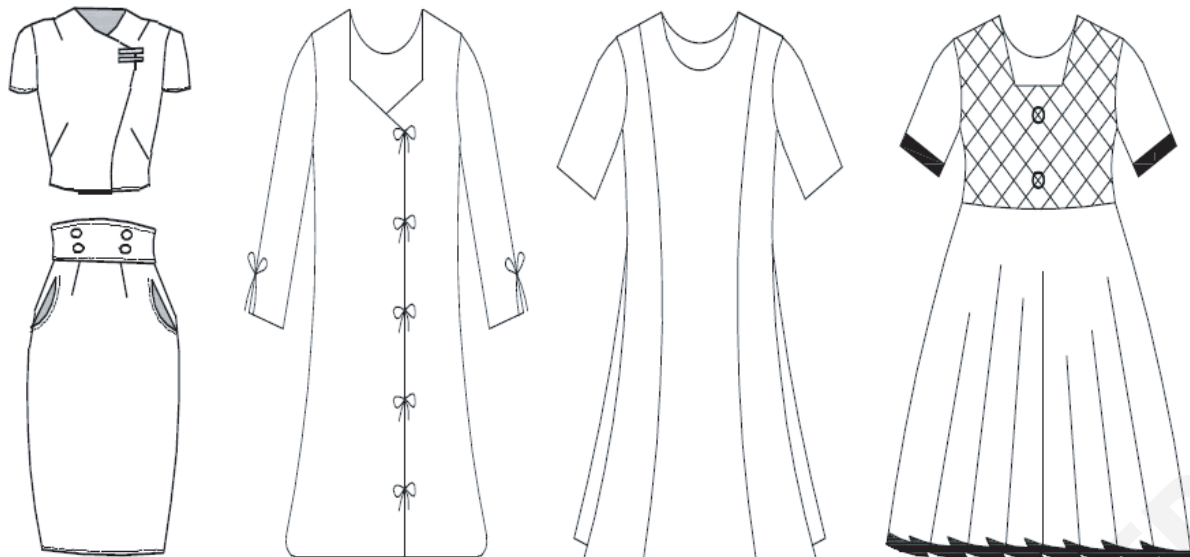




TASK 2: Sketch different types of ladies top

- 1 Sketch the different types of ladies suit in the following figures. (Figs 1 & 2)
Using 2H pencil in the cartridge paper.
- 2 Use fine pencil lines for easy corrections.
- 3 Make necessary corrections after completing the sketches.
- 4 Draw the sketches with black fine liner.
- 5 Choose suitable colours and apply them as required to get the effect using poster colours and brushes of suitable sizes.

Fig 1



OVERLAP TOP WITH STRAIGHT SKIRT(A)

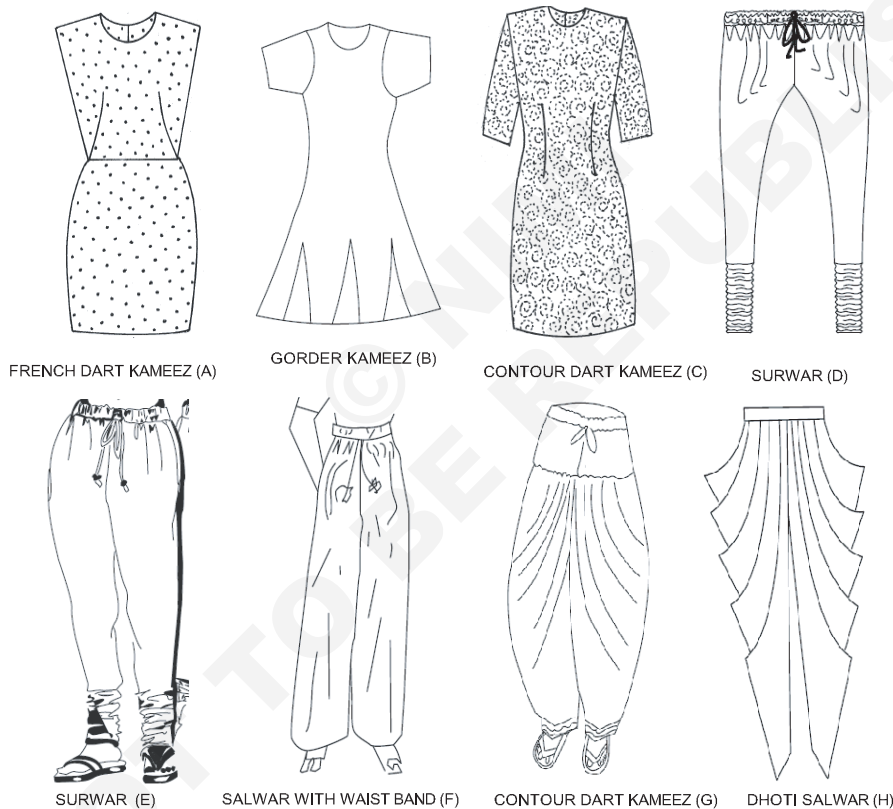
OVERLAP KAMEEZ (B)

PRINCESS LINE KAMEEZ (C)

UMBRELLA KAMEEZ (D)

DRN2137/1

Fig 2



FRENCH DART KAMEEZ (A)

GORDER KAMEEZ (B)

CONTOUR DART KAMEEZ (C)

SURWAR (D)

SURWAR (E)

SALWAR WITH WAIST BAND (F)

CONTOUR DART KAMEEZ (G)

DHOTI SALWAR (H)

TASK 3: Sketch different types of gent's pyjamas

- 1 Sketch the different types of gent's kurta given in the following figure (Fig 1-9) using 2H pencil in the cartridge paper.
- 2 Use fine pencil lines for easy correction.
- 3 Measure necessary corrections after completing the sketches.
- 4 Draw the sketches with black fine liner.
- 5 Choose suitable colours and apply them as required to get the effect using poster colours and brushes of suitable sizes.
- 6 Design a garment according to the theme "Gents pyjamas".
- 7 Decide the fabrics suitable for the designed garment.
- 8 Sketch the designed garment with its detailed style features.
- 9 Apply suitable colours to the garment with proper effects.

Fig 1



FUNKY PYJAMA

Fig 2



LOUNGE BOTTOM PYJAMAS PANT

Fig 3



BOTTOM SLIM PYJAMA

Fig 4



TIGHT BOTTOM PYJAMA

Fig 5



SLIT BOTTOM PYJAMA

Fig 6



CHECKED
COTTON

Fig 7



WOVEN DOT PYJAMA

Fig 8



AOMI PYJAMA

Fig 9



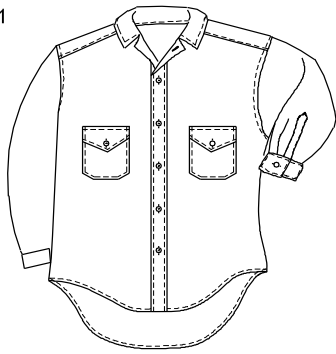
PANT STRIPED PYJAMA BOTTOM

TASK 4: Sketch different types of shirts

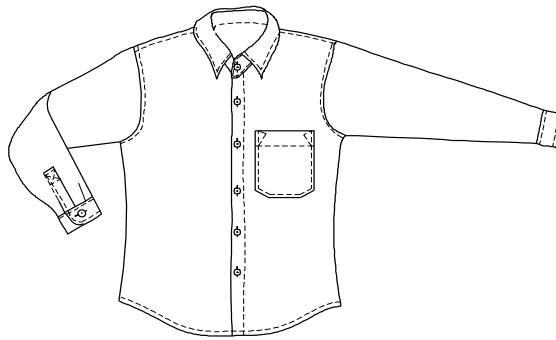
- 1 Sketch the different types of shirts given in the following figures (Fig 1 to Fig 10) using 2H pencil in the cartridge paper, use fine pencil lines for easy corrections.
- 2 Make necessary corrections after completing the sketches.
- 3 Draw the sketches with Black fine liner.
- 4 Choose suitable colours and apply them as required to get the effect using poster colours and brushes of suitable sizes.

Get the work checked by your instructor.

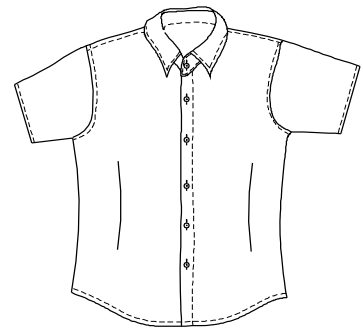
Fig 1



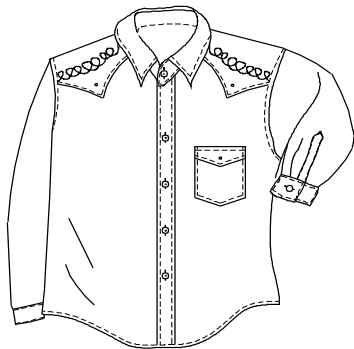
LUMBERJACK / LOGGER'S SHIRT (A)



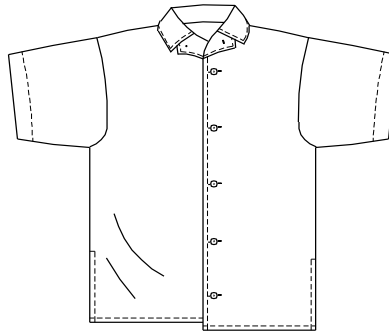
SELF YOKE GENTS SHIRT (B)



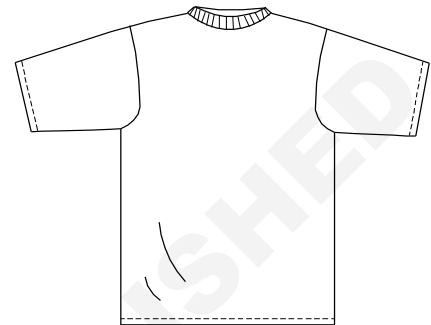
LADIES SHIRT (C)



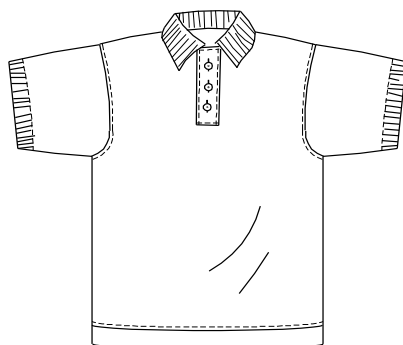
WEATERN SHIRT (D)



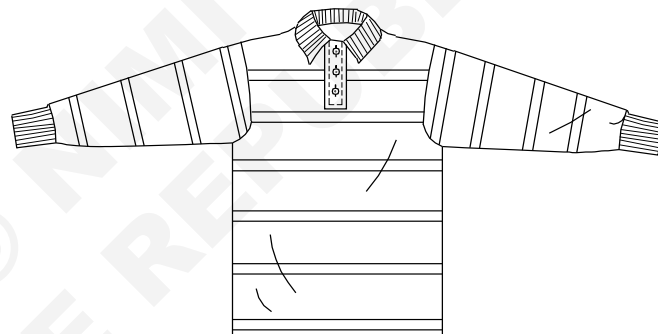
BOWING SHIRT (E)



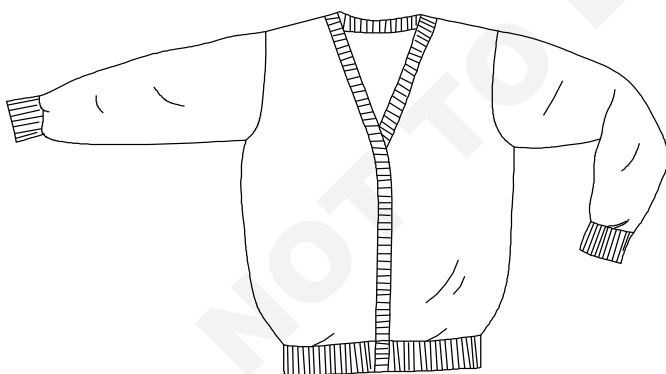
'T' SHIRT (F)



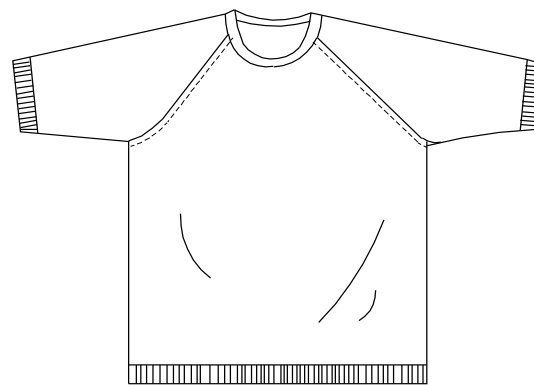
POLO SHIRT (G)



RUGBY SHIRT (H)



CARDIGAN (I)



RAGLAN 'T' SHIRT (J)

DRN2137X1

Sketching of western dress

Objective: At the end of this exercise you shall be able to

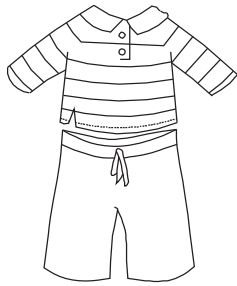
- sketch the different types of western dress.

TASK 1: Draw different types of western dress

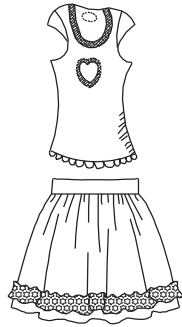
- 1 Take a page of cartridge paper.
- 2 Draw a garment used for office give below by free hand drawing using 2H pencil. (Fig 1)
- 3 Follow the proportion while sketching.
- 4 Complete the figure often proper corrections.
- 5 Decide which colours to use.
- 6 Apply the poster colours with proper effects using suitable brush sizes.



Fig 1



PURITAN COLLAR
T-SHIRT WITH SHORTS



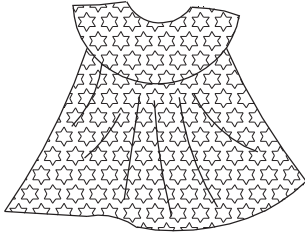
CAP SLEEVE TOP WITH
LAYERED SKIRT



WRAP NECK FROCK



PLAIN FROCK
SLEEVELESS



CROCHET FROCK



MIRANDA



YOKE FROCK



GATHERING FROCK



BABY MIRANDA



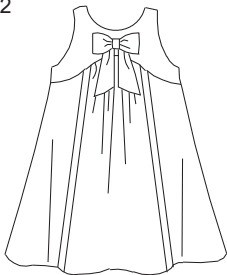
SLEEVELESS MIRANDA



FROCK

DRN2137Y1

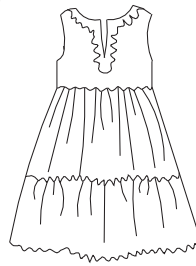
Fig 2



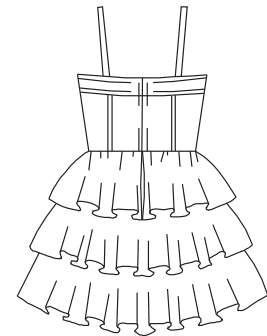
DECORATIVE YOKE BOW FROCK



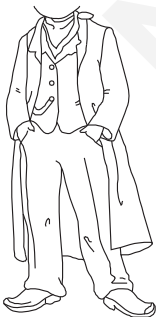
SHIRT AND PANT



DOUBLE LAYER FROCK



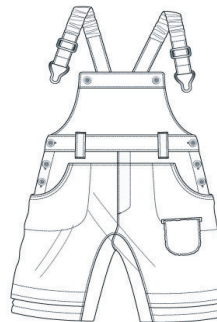
NOVELTY GATHER FROCK



KIDS COAT SUIT



GIRL PARTY GOWN



SLACK



T-SHIRT

Drafting and draping of bodice block

Objectives: At the end of this exercise you shall be able to

- construct the basic set of block pattern as per size 8 measurement chart
- prepare the dress form
- extract the measurement
- prepare muslin block
- measure and mark guide lines
- drape the front
- mark the front
- trace the front
- drape the back
- mark the back
- trace the back.

Requirements

Tools/Instruments

• Measuring tape	- 1 No.	• Muslin fabric	- 1 No.
• Scissors	- 1 No.	• Metal weights	- 1 No.
• L-scale	- 1 No.	• Tracing wheel	- 1 No.
• Paper	- 1 No.	• Awl	- 1 No.
• Pencil or pen	- 1 No.	• Push pins	- as reqd.
		• Ball pins	- 1 No.

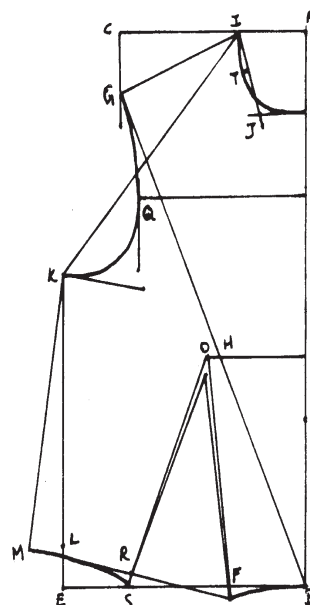
TASK 1 : Construct the basic set of block pattern as per size 8 measurement chart.

INSTRUCTIONS FOR DRAFTING

Fig 1

The front bodice draft (Fig 1)

A-B =	Square out from A and B
Full Length	
A-C = Across shoulder	Square down 3" from C for guide.
B-D =	Mark D
Centre front length - $\frac{1}{2}$ "	Square out 4" from D for guide.
B-E = Bust arc + $\frac{1}{4}$ "	Mark E, square up from E for guide.
B-F = Dart placement	Square down $\frac{3}{16}$ " and mark F
B-G = Shoulder slope + $\frac{1}{8}$ "	G touches on C guideline.
G-H =	Mark H.
Bust depth	
G-I = Shoulder	Square down from G-I to intersect with D guideline. Label J. (Measure from A-I and record for back neck width for the back draft).
I-K = Front strap + $\frac{3}{8}$ "	K touches E guideline.
K-L = Side length	Mark L.
L-M = $\frac{1}{4}$ "	Mark M.
K-M = K-L	Draw K-M.
	Square out a short line from K.
	Draw line connecting M to F.
	Draw a squared line through H that meets the centre front at N
N-O = Bust span + $\frac{1}{4}$ "	N-O passes through H
D-P = One third of D-N	Mark P
P-Q = Across chest + $\frac{1}{8}$ "	Square a guideline up and down from Q



(This guideline will help in drawing the front armhole curve)

M-R = Waist arc + $\frac{1}{4}$ " ease
ment

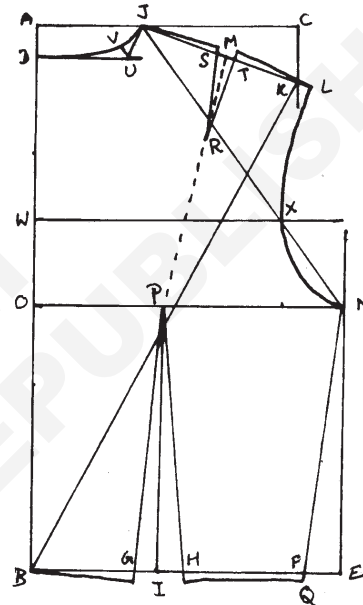
Mark R
Draw line from O to F.
Draw line from O through R equal to O-F measurement.

B-F measurement	<p>Mark S</p> <p>Draw curve of waistline from M to S and blending F to B. To establish dart point, measure $\frac{1}{2}$" from O, mark, centre. Re-draw dart legs to dart point.</p>
I-T = One half of I-J	<p>Square in $\frac{1}{8}$" and mark T</p> <p>Draw curve of front neckline using a French curve connecting I-T and D guideline.</p> <p>Draw armhole curve touching G, Q and ending on K guideline</p>

The back bodice block

Fig 2

A-B = Full length	Square out from A and B.
A-C = Across shoulder	Square down a 3" guide line from C.
B-D = Centre back length	Mark and square out a 3" guideline from D
B-E = Back arc + $\frac{3}{4}$ "	Square a guideline up from E.
B-F = Waist arc + $1\frac{1}{2}$ " for dart intake + $\frac{1}{4}$ " ease	Mark F.
B-G = Dart placement	
G-H = Dart intake	
G-I = One half of G-H.	Mark I.
A-J = A-I (of the front bodice draft) + $\frac{1}{8}$ ".	Mark J.
B-K = Shoulder slope + $\frac{1}{8}$ "	
J-L = Shoulder length + $\frac{1}{2}$ " (dart intake)	K touches on C guideline. Shoulder line may pass through K.
J-M = One half of J-L	Mark M.
	Square down from J-L to intersect with D guideline.
	Label U
J-N = Back strap + $\frac{3}{4}$ "	N touches on E guideline
	Mark N From N square to centre back. Label O.
O-P = B-I	Mark P.
	Draw a line from P to I
	Draw lines from P $\frac{1}{8}$ " past G and H.
N-Q = Side length	Line may pass through F.
	With ruler touching M and P (dotted line) draw a 3" line from M to R
M-S = $\frac{1}{4}$ "	Mark S
M-T = $\frac{1}{4}$ "	Mark T
	Draw line from R $\frac{1}{8}$ " past S. Content to J.
	Draw line from R through T, equal to R-S length and connect to L
J-U =	Square down from J-S line and



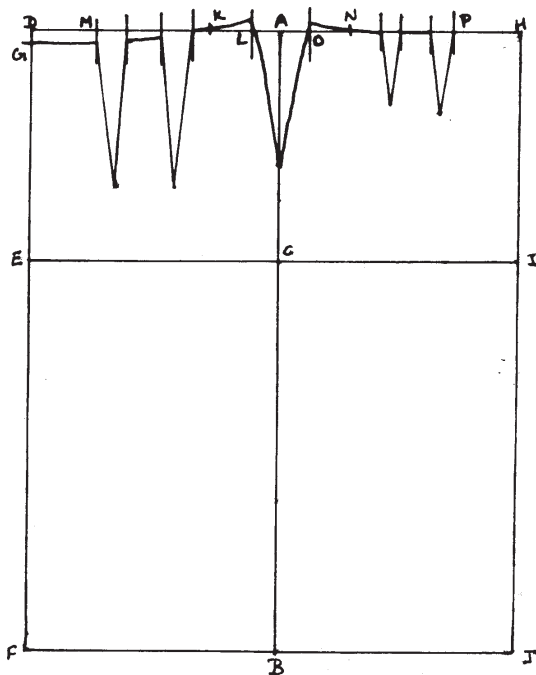
U-V

O-W = $\frac{1}{3}$ of O-D
W-X = Across back + $\frac{3}{8}$ "

mark U on the D guideline
Square out $\frac{3}{8}$ " up from U, mark V.
Draw neckline connecting D-V and J using a French curve
Mark W, square out from W
Mark X, square down from X to act as reference line for back armhole curve
Using a French curve draw armhole connecting N-X-L.

CT12345H2

Fig 3



D-M = Dart placement

Measure 1" from M (dart intake), mark Space 1 1/4" between darts, mark.
Measure 1" from mark (dart intake) and mark for second dart.
Square up and down at each dart mark.
Square up and down from point L.

Front

H-N = Front waist arc + 1/4"

N-O = 1" (dart intake)

H-P = Dart placement

Measure 1/2" from P (dart intake), mark
Space 1 1/4" between darts, mark.
Measure 1/2" from mark (dart intake) and mark for second dart.
Square up and down at each dart mark.
Square up and down from point O.

Front and Back

C-L and C-O =

Hip depth at side seam

Draw front and back hipline curve using a hip curve ruler. Measure up from point C until the measurement touches on L and O line. Label points as Q and R respectively.
Draw waistline using shallow side of hip curve ruler, from points G and H to hip marks Q and R.

Drafting of front and back skirt blocks (Fig 3)

A-B = Skirt length as desired

A-C = Centre front hip depth

A-D = Back hip arc + 1/2" for ease

C-E = A-D

B-F = A-D

E-G = Centre back hip

A-H = Front hip arc + 1/2" for ease

C-I = A-H

B-J = A-H

Square out from A and B in both directions

Mark C, square out from C in both directions

Connect D to F

Cross mark at G depth

Connect J to H

Back

D-K = Back waist arc + 1/4" ease

K-L = 2 inches (dart intake)

Back darts

Locate dart centres and square down 5 1/2" from D-H line. Draw dart legs from curve on waistline to dart points. True darts legs by adding to the shorter leg blending with waistline

Front darts

Locate dart centres and square down 3 1/2" from D-H line. Draw dart legs from curve of waistline to dart points. True dart legs by adding to shorter leg, blend with waistline. Cut and separate front and back skirt blocks from paper.

Drafting of sleeve block**Sleeve frame**

A-B = Sleeve length

A-C = Cap height

C-D = One half of C-B - 1"

C-E = One half of biceps

C-F = C-E

B-G = 2" less than C-E

B-H = B-G

Square out from both sides of A, B, C and D

Connect G to E and H to F
Label elbow level and J**Sleeve Cap**

E-K = One fourth of E-C

F-L = E-K

A-M = E-K

A-N = E-K

Square the following points:

K = 1" up, label O

M = 5/8" down, label P

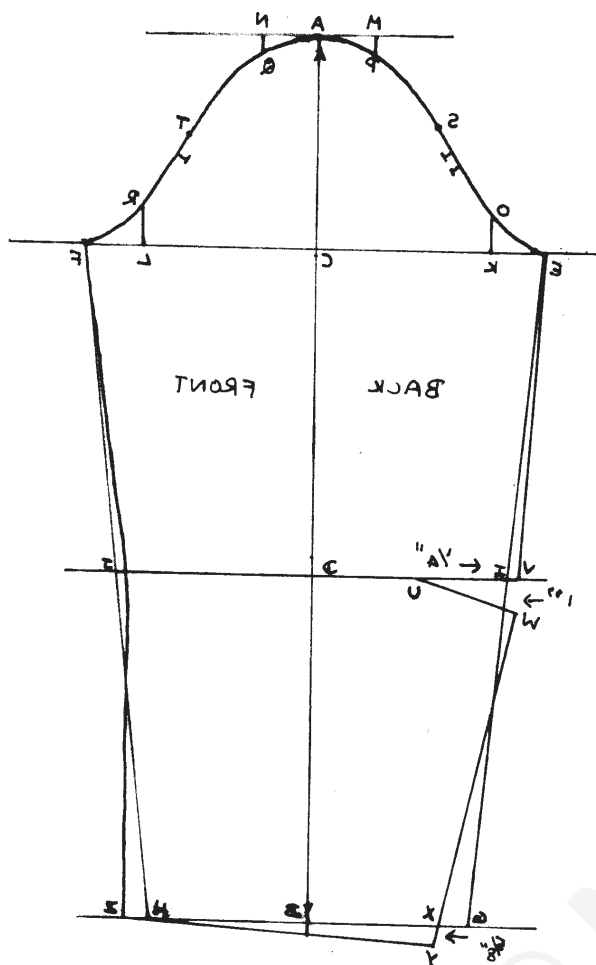
N = 1/2" down, label Q

L = 5/8" up, label R.

With ruler touching points O-P and Q-R dot mark mid points, label S on back mid point.

Measure 1/8" out on midpoint of Q-R on front and label T.

Fig 4



Shape the sleeve cap joining points E, O, S, P, A, Q, T, R and F, use a French curve for it.

Elbow dart

I-U = One-half of I-D

I-V = $\frac{1}{4}$ "

V-W = 1" (dart intake)

G-X = $\frac{5}{8}$ "

Y-Z = G-H

Draw line from V to E
Connect U to W equal to U-V measurement.

Mark X.

Draw line from W through X equal to V-G measurement

Label Y.

Line touches on the wrist guideline.

Connect Z $\frac{1}{8}$ " in from J and to F. Blend with a slightly curved line

Sleeve notches

Sleeve notches identify the back from the front sleeve when at teaching sleeve to bodice and to control ease distribution.

Back sleeve

Two notches spaced $\frac{1}{2}$ " apart, mark first notch 1" down from point S, square notches with curve of cap.

Front sleeve

One notch, marked $\frac{3}{4}$ " down from point T and squared in from curve of cap. (Check sleeve with bodice armhole, adjust armhole if necessary. Mark sleeve attaching notches on front and back bodice blocks measuring up from side seam.)

TASK 2 : Prepare the dress form

- 1 Prepare the dress form for draping. Seams on the dress form shall be used for reference point in draping.
- 2 Align shoulder and side seams by using the tape measure. (Fig 5 & 6)
- 3 Make all the correction on the dress form by clipping the pins into the form at correct seam intersections.

Ladies Trousers Block Size 14 Medium

Body Measurement

Trousers Length = 100 cm
Crotch = 27 cm
Hip Level = 22 cm

Waist = $70 + 2 = 72$ cm
Hip = $98 + 2 = 100$ cm
Knee = $38 + 10 = 48$ cm
Hem Width = $38 + 10 = 48$ cm

Construction of Ladies Trousers Block

Draw a line in the center & mark 0

Front

0-1 = 100 cm (External Seam)

Square in & out from 0 & 1 Crease Line
Waist line & Hem Line

0 - 2 = 27 cm (Crotch Length)
 2 - 3 & 2 - 4 = 14.5 cm (Hip/8 + 2 cm)
 2 - 5 = 31.5 cm [1/2 of 2 - 1 (-Hip/20)]
 3 - 6 = 5 cm (Hip/20)

 7 - 8 = 20.5 cm (w/4 (+1 cm)+ Dart} Dart 1.5 cm
 8 - 9 = 1 cm
 0 - 10 & 0 - 11 = 0.75 cm
 0 - 12 = 8 cm (Dart Length)
 5 - 13 & 5 - 14 = 12 cm (Hem width/4)
 1 - 15 & 1 - 16 = 11 cm [Hem width/4 (-1 cm)]

Square in & out from 2 Crotch line

Square in & out from 5 Knee Line

Square up from 6 & mark 7

Shape 3 - 7

Shape 9 - 4

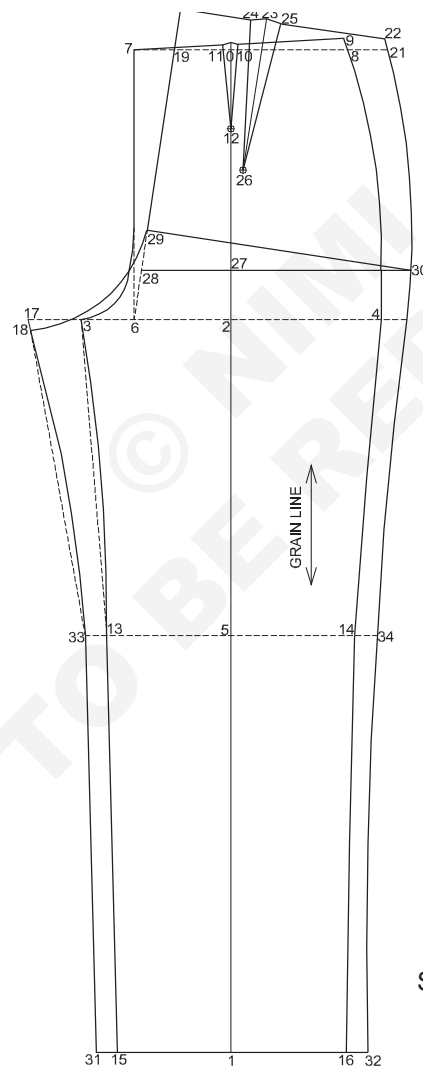
Join 10 - 12 & 11 - 12 (Dart)

Join 16 - 14, 15 - 13 & 3 - 13

Shape 3 - 13 and Shape 9, 4, 14

7, 9, 4, 14, 16, 1, 15, 13, 3, 7 is Trousers Front

Fig 3



Back

3 - 17 = 5 cm (Hip/20)
 17 - 18 = 1 cm
 7 - 19 = 4 cm
 20 - 21 = 20 cm [(W/4 (-1 cm) + Dart] (Dart 3 cm)
 21 - 22 = 1 cm
 20 - 23 = 8.5 [W/10 (+ 1.5 cm)]
 23 - 24 & 23 - 25 = 1.5 cm (Dart 3 cm)

Square down from 17

Join 6 - 19 & extend by 4 cm & mark 20

Square up from 21

23 - 26= 15 cm (Parallel to 20 - 6 line)

Join 24 - 26, 25 - 26 (Dart)

0 - 27= 22 cm (Hip Level) & mark 28

28 - 29= 4 cm

29 - 30= 26 cm [Hip/4 (+1 cm)] (Seat angle)

Shape 18 - 29

1 - 31 & 1 - 32 = 13 cm (Hem width/4)

Join 31 - 33, 32 - 34 & 33 - 18

5 - 33 & 5 - 34 =14 cm [Hem width/4 (+2 cm)]

Shape 33 - 18

Shape 22 - 30 - 34

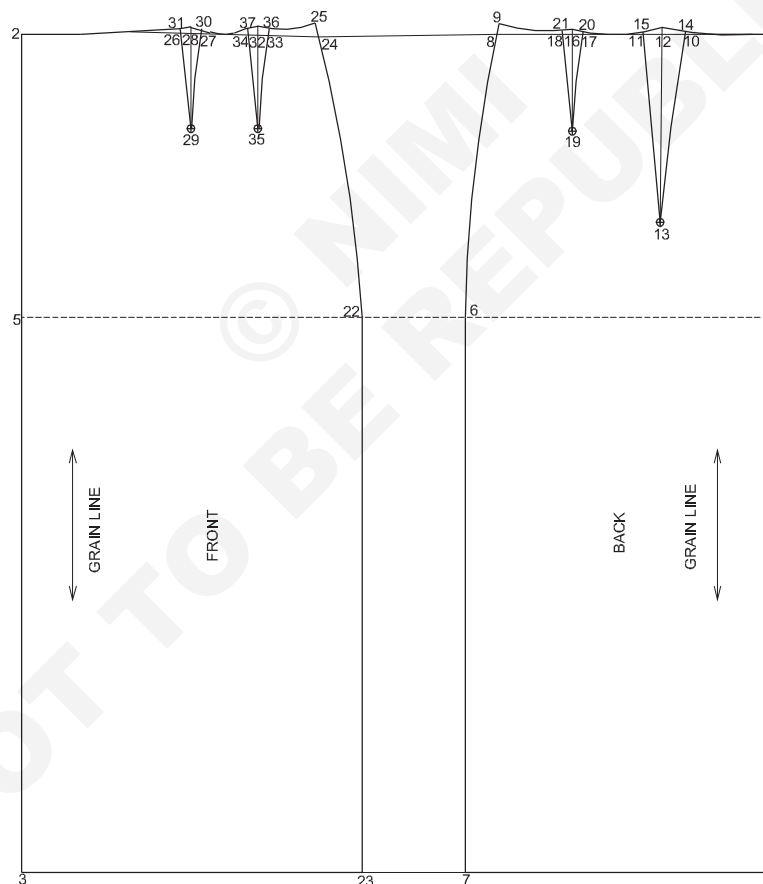
20, 22, 30, 34, 32, 31, 33, 18, 29, 20 is Trousers back.

Standard Skirt Block Size Medium

Body Measurements

Waist = 70 + 2 =72 cm
Hip = 98 + 2 =100 cm

Fig 4



Hip Level = 22 cm
Skirt Length = 65 cm

Construction of Block

Draw a vertical line

Square out & down from 0

0-1= 65 cm (Skirt Length)

0-2 =58 cm ($1/2$ Hip + 8)

0,1,2,3 is a Frame

0-4 = 22 cm (Hip Level)

4-6= 24 cm [Hip/4 (-1 cm)]

0-8= 21.5 cm [w/4 (-1 cm)]+ dart

8-9= 1 cm

0-10 = 7.2 cm (Waist/10)

10-11= 3 cm (Dart Width)

12-13= 15 cm (Dart Length)

16 -17, 16 - 18= 0.75 cm (1.5 cm width of Dart)

16 - 19= 8 cm (Length of Dart)

0, 1, 7, 6, 9, 0 is skirt Back.

Front

5 - 22= 26 cm [Hip/4 (+1 cm)]

22 cm [w/4 (+ 1 cm) + Dart] (Two darts of 1.5 cm each.)

24 - 25= 1 cm

2 - 26 = 11.4 cm [(W/5 (-) 3]

26-27= 1.5 cm

28-29= 8 cm (Length of Dart)

32-33 & 32-34 = 0.75 cm (1.5 cm width of Dart)

32-35= 8 cm (Length of Dart)

Square out from 1 & square down from 2 & mark 3.

Square out from 4 & mark 5

Square down from 6 & mark 7

(1st dart 3 cm wide, 2nd dart wide)

Square up from 8 & mark 9

Shape 9-6

Mark 12 at center of 10-11

Square down from 12 & mark 13

Join 13 - 10 & extend 0.5 cm & mark 14

Join 13 - 11 & extend 0.5 cm & mark 15

Mark 16 at center of 8-11

Square down from 16

Join 19-17 & extend 0.5cm & mark 20

Join 19-18 & extend 0.5cm & mark 21

Shape 9 - 21, 20 - 15, 14 - 0.

Square down from 22 & mark 23. 2 - 24

Square up from 24

Shape 25 - 22

Mark 28 at center of 26 - 27

Square down from 28

Join 29-27 & extend 0.5cm & mark 30

Join 29-26 & extend 0.5cm & mark 31

Mark 32 at center of 27-24

Square down from 32

Join 35-33 & extend 0.5cm & mark 36

Join 35-34 & extend 0.5cm & mark 37

Shape 2-31, 30-37, 36-25

Practice of developing dress patterns from draping technique

Objectives: At the end of this exercise you shall be able to

- prepare the dress form for draping
- prepare the fabric for draping
- drape the front bodice on the dress form
- transfer the draped muslin to the paper pattern
- prepare the fabric for back bodice
- drape the back bodice on the dress form.

Requirements

Tools / Instruments

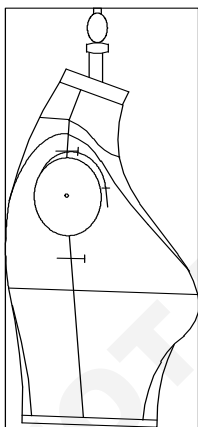
- | | | | |
|---------------------------|---------|-----------------|------------|
| • Measuring tape | - 1 No. | • Awl | - as reqd. |
| • Scissors | - 1 No. | • Push pins | - as reqd. |
| • L-Scale ruler | - 1 No. | • Pins | - as reqd. |
| • Ruler paper or Notebook | - 1 No. | • Muslin fabric | - 1 No. |
| • Pencil or Pen | - 1 No. | • French curve | - 1 No. |
| • Tracing wheel | - 1 No. | • Hip curve | - 1 No. |

PROCEDURE

TASK 1: Prepare the dress form for draping

- 1 Place a pin 1 inch below the armhole plate at the side seam to mark the under arm/side seam intersection.
- 2 Leave this pin in the form for reference.

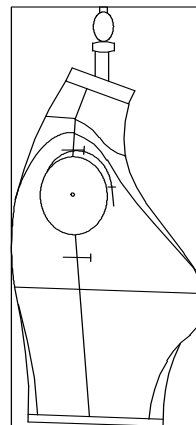
Fig 1



AP-64P01801

- 3 Place a pin at the edge of the shoulder tip/armhole intersection.
- 4 This point is located at the shoulder seam where the shoulder tip just begins to curve downward toward the armhole plate.
- 5 Place a pin directly across from the screw in the arm plate, measured 1/4 inch into the fabric away from the plate on the front, only to mark the front mid-armhole point.

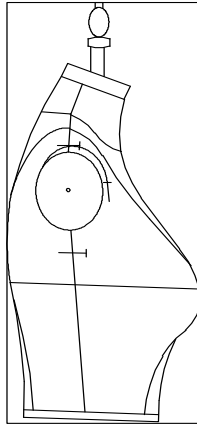
Fig 2



AP-64P01802

- 6 Establish the bust level which on the front of the form is called as the apex or bust point position.
- 7 Mark along the princess seam on the right and left sides of the form at the fullest part of the bust round or curve, which is at the largest circumference of the bust line.
- 8 Place pins at each apex/bust point and leave them in the form.
- 9 Take a length of narrow ribbon or twill tape and pin it from apex to apex without slack.
- 10 Pin the ribbon completely around the form, parallel to the floor, to establish the bust level.

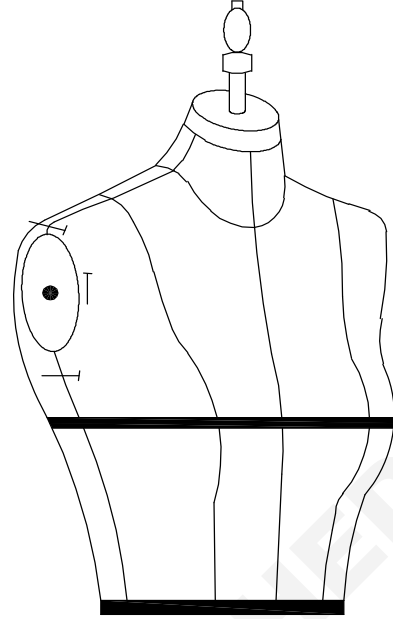
Fig 3



AP-B4P01803

- 11 Establish the waist line if it is not placed the form. But in most of the body forms, the waist line is marked by a woven tape.
- 12 Pin the tape or ribbon around the hip level.

Fig 4

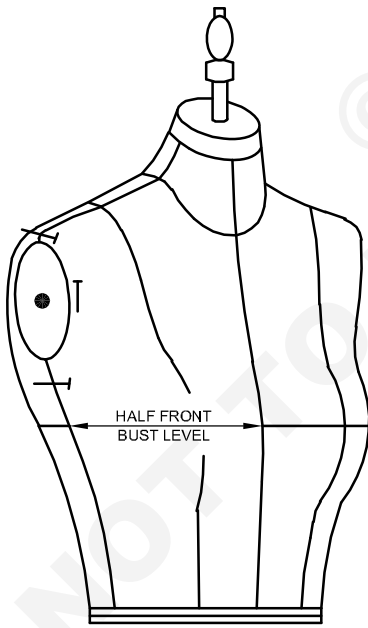


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TASK 2: Prepare the fabric for draping

- 1 **Half the front bust level** = Measure straight out from centre front, over the bust point to the side seam, parallel to the floor (Fig 1).

Fig 1



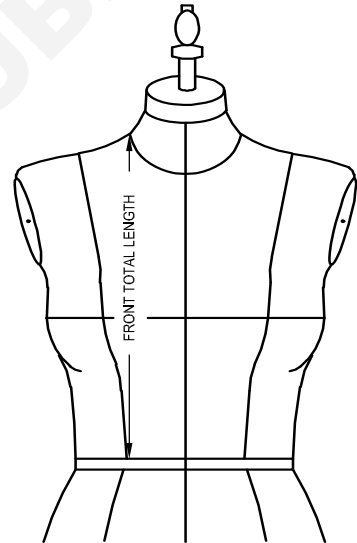
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- 2 **Front Total Length** = Measure from the high neck point over the bust to the waist (Fig 2)

Blocking the Fabric

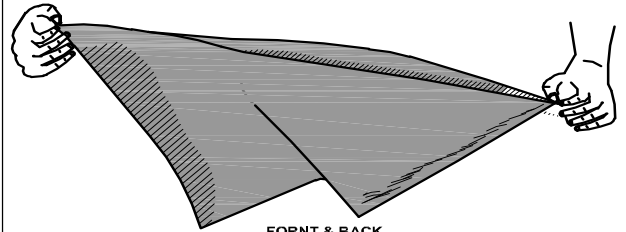
- 3 Mark the straight grain of the muslin fabric parallel to the selvages or length of the fabric.
- 4 Mark the cross grain at a perfect 90-degree angle to the straight grain.

Fig 2



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Fig 3

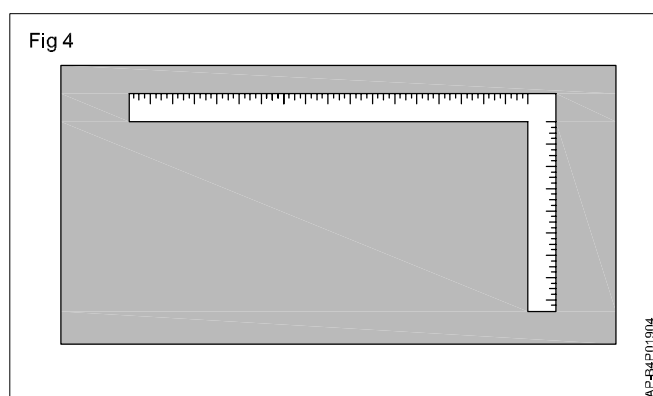


FORNT & BACK

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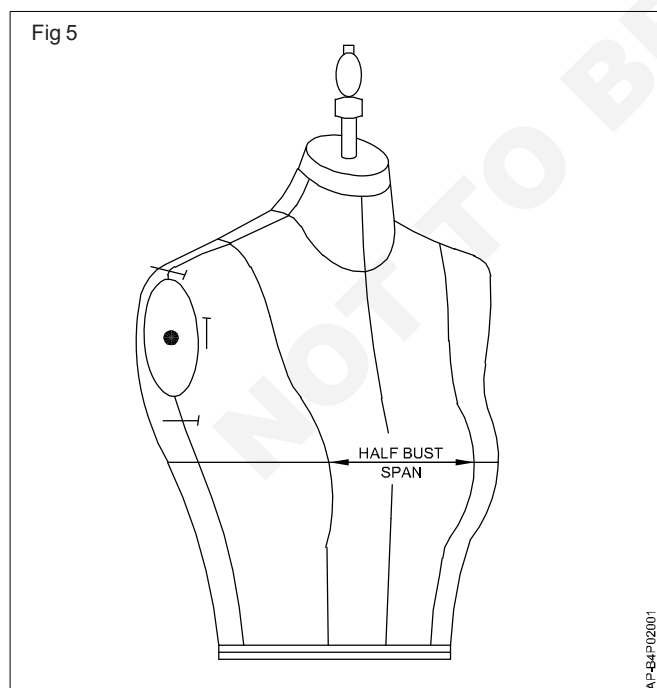
If the grain lines are not perfectly aligned, you will need to block the fabric to be used for draping. To block the fabric, pull on the opposite corners of the muslin rectangle and then press it with a steam iron to make the cross grain and straight grain align correctly.

- 5 Select the size of the muslin rectangle to be draped.
- 6 Add 6-inches to front total length measurement for the total length of the straight grain on muslin on muslin fabric.
- 7 Add 4-inches to half front bust level measurement for the total width of the cross grain on muslin rectangle.
- 8 Cut the muslin fabric by clipping into the selvedge and tear from selvedge to selvedge.
- 9 Clip into the cross grain 3/4 inch to 1 inch from selvedge's and tear these strips away.
- 10 Place L-square on top of the muslin rectangle to check whether the fabric lies at straight or not. (Fig 4)



Selvedge's tend to be woven tighter than the rest of the fabric so you must not use them on your drapes.

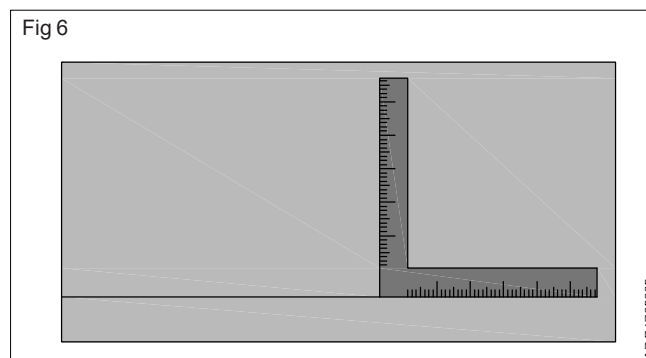
Ease Instruction: Total Bust level ease = 2 inches, Total waist level ease = 1 inch. (Fig 5)



Measurement

Half Bust span: Measure from apex to apex and then divide the measure by 2.

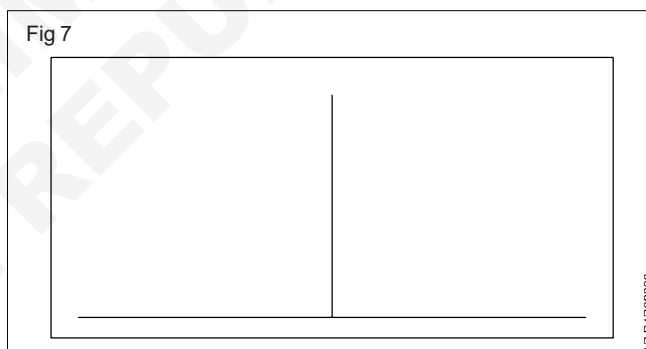
- 11 Draw a line 1- inch from the edge along the straight grain of the muslin rectangle. (Fig 6)



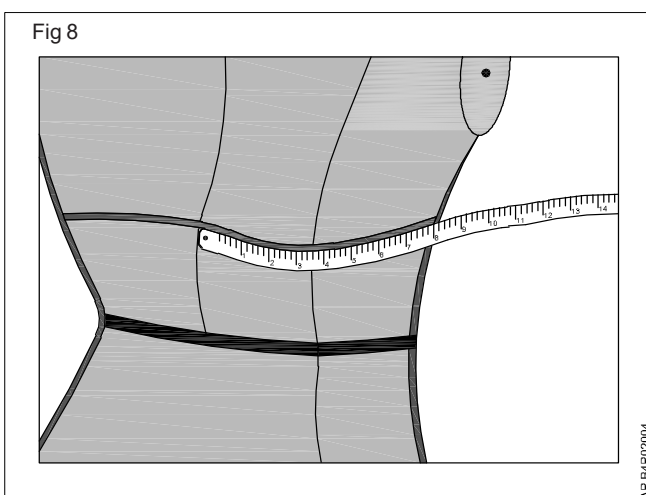
- 12 Find the centre line by using a L - Scale.
- 13 Draw a line along the cross grain for the bust level.

You can first mark this position with a pin and check the muslin against your body form to make sure there is enough extra fabric above and below the bust level for the size you are working.

- 14 Measure from the centre front line along the bust level line using half bust span measure and mark cross mark for the apex/bust point (Fig 7)



- 15 Place a pin halfway between the apex and the side seam on your body form.
- 16 Then measure from centre front along the bust level to the pin = -----(Fig 8).

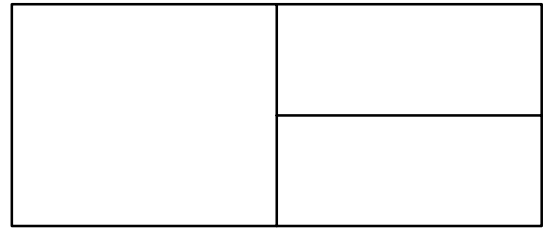


The above mentioned measurement will be the princess panel position.

- 17 Measure along the bust level on the muslin rectangle from centre front out to the princess panel position and cross mark.
- 18 Continue a line below the bust level from this cross mark, which is on the straight grain, parallel to centre front.

- 19 Place the muslin on the ironing board and press under the 1 inch strip beyond the centre front line.

Fig 9



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TASK 3: Prepare the front bodice on the dress form

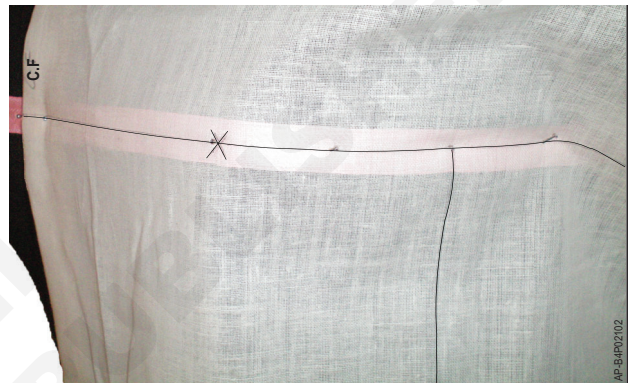
- 1 Place the muslin on the form, matching the centre front of the muslin with the centre front of the form (Fig 10).

Fig 10



AP-B4P02101

Fig 11



AP-B4P02102

The bust level tape should be perfectly parallel to the floor, to keep the bust level of the muslin straight. The princess panel position line will hang perfectly perpendicular to the floor. This line may not look straight because it is angled in toward the waist line, but you can check it with a carpenter's level. (Fig 12)

- 2 Match the bust level line on the muslin to the bust level tape on the form.
- 3 Pin the muslin to the tape at centre front.
- 4 Pin the centre front muslin to the form, but do not pin it into the form at the bust level.
- 5 Place a pin at the apex cross mark into the apex position on the form.

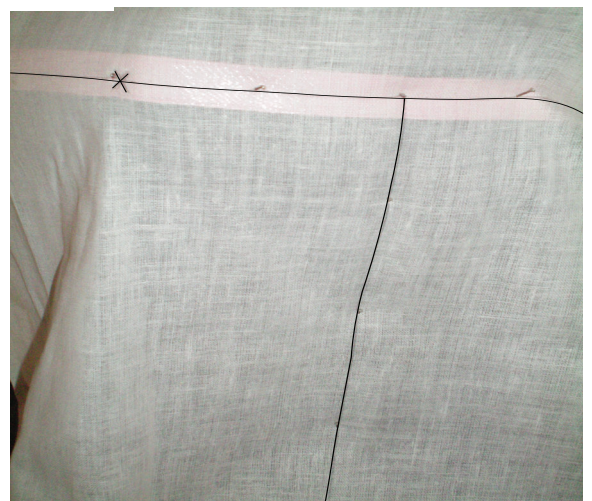
The muslin should be attached only to the tape in this area.

Continue pinning the bust level line to the bust level tape on the form without pulling the fabric tightly (Fig.2)

It is important to avoid strain on the fabric while draping against the form.

- 6 Pin the princess panel position line on to the form. (Fig 11)

Fig 12



- 7 Trim away a quarter-pie shaped piece of muslin at the front neckline corner, being careful not to cut too deep (Fig 13)



- 8 Clip the muslin toward the neckline (Fig 14)



This will allow the fabric to fit closely against the neck without any folds or straining.

- 9 Smooth the muslin to fit against the body form neckline without stretching the fabric (Fig 15).
- 10 Place a pin at the shoulder /neckline intersection.
- 11 Continue smoothing the muslin along the shoulder and place at the centre of the front shoulder seam to mark the first notch of the shoulder dart.
- 12 Use pencil to mark dashed lines along the neckline seam and make a cross mark at the centre of the shoulder seam.

Fig 15



- 13 Convert the excess muslin above the bust level into the shoulder dart by allowing a 1/4 inch deep pinch of extra fullness at the mid-armhole, which makes the front armhole more comfortable when worn (Fig 16).

Fig 16



- 14 Fold the muslin at the centre of the shoulder cross mark with the dart intake/excess going toward centre front and pin in place.
- 15 Make a cross mark at the centre of the shoulder and along the shoulder seam to mark the second notch of the shoulder dart.

The folded edge should extend down toward the apex.

- 16 Pin the shoulder dart in place going across the dart until you get to the point where the last pin will go lengthwise (Fig 17).
- 17 Draw in the shoulder seam with a pencil, using dashed lines, and cross mark the shoulder tip position. (Fig 18).
- 18 Pin the muslin to the form at the underarm/side seam intersection (Fig 19).
- 19 Mark dashed lines along the upper armhole, on the ridge of the form, extending to the pin placed 1/4 inch from the armhole plate.

Fig 17



Fig 18

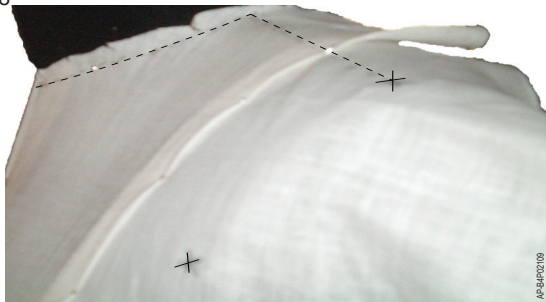
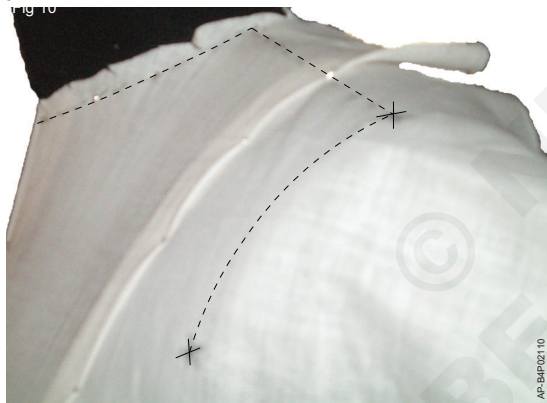


Fig 19



20 Mark a cross mark at the underarm/side seam intersection.

21 Pin the muslin to the form along the side seam and at the waist.

22 Mark dashed lines along the side seam, and make a cross mark at the waist line.

Normally, the centre of the waist tape is used as the waistline seam.

Measurement

23 Dart Placement: Measure out from centre front to the princess seam on the body form

24 Clip the muslin from the bottom edge up toward the waistline (Fig 20)

25 Mark dashed lines along the waistline from centre front over to the princess line on the form, and cross mark the princess line.

Fig 20



If your form does not have a princess line seam, use the dart placement measure which is measure from centre front, to mark a cross mark for the first notch of the waist dart.

26 Mark a cross mark at the princess line for the second notch of the dart, and continue marking the waist with dashed lines (Fig 21)

Fig 21



27 Pin the waist dart with the pins going across the dart until you get to the dart point, where the pin will go lengthwise.

28 The finished front drape is shown in (Fig 22)

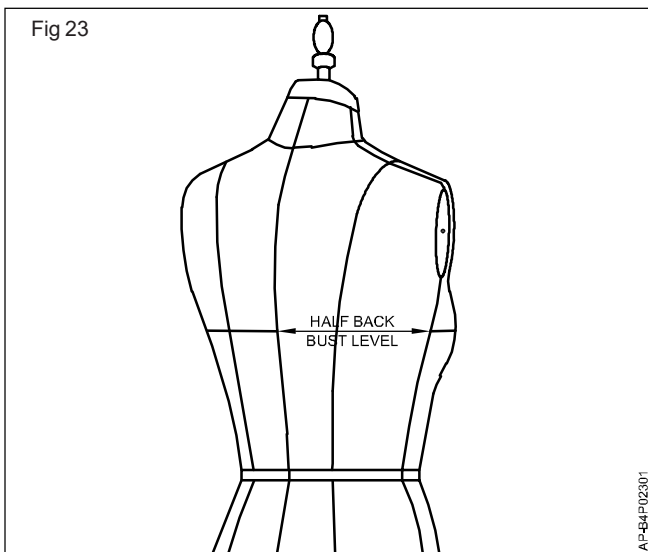
Fig 22



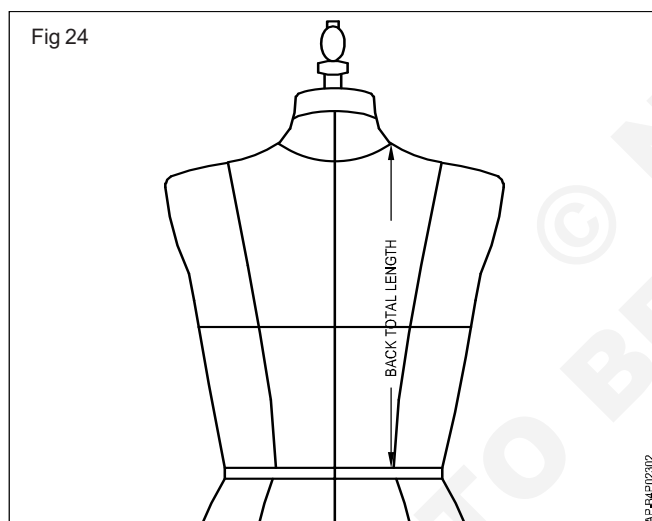
TASK 4: Prepare the fabric for back bodice

Measurements

- 1 Half Back Bust Level: Measure straight out from centre back to the side seam, parallel to the floor (Fig 23).



- 2 Back Total Length: Measure from the high neck point down the back to the waist (Fig 24).

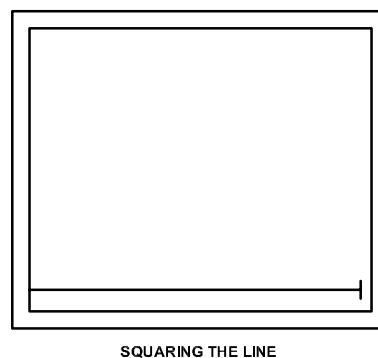


- 3 Prepare the muslin for the back bodice as you did for the front bodice by tearing along the straight grain adding 6 inches to back total length measure.
- 4 Tear along the cross grain, adding 4 inches to half back bust level.
- 5 Block the fabric as needed.
- 6 Draw a line 1 inch in from the edge along the straight grain of the muslin rectangle (Fig 25).

This line will be the centre back.

- 7 Place the muslin against the body form, matching the centre back line to the form.

Fig 25



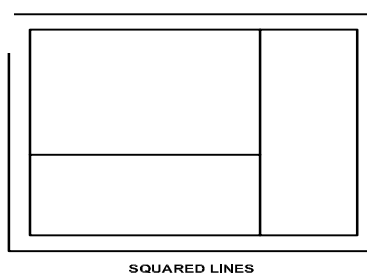
Be sure there is enough extra fabric above the shoulder seam and below the waistline. While the muslin is in this position, make cross mark for the centre back neck position and the centre back waist position.

- 8 place a pin halfway between the princess line and the side seam along the bust level on the body form to mark the princess panel position.
- 9 Measure from centre back along the bust level to the pin = _____

The above mentioned measure will be the princess panel position.

- 10 To find the shoulder blade level, measure the centre back from the neck to the waist = _____, divide this by 4 = _____
- 11 Using this last number, measure from the centre back neck position down toward the waist and make a cross mark.
- 12 At this cross, mark, continue a line at a perfect 90-degree angle to centre back. (This is the shoulder blade level).
- 13 Use the princess panel position measure to make a cross mark at shoulder blade level from centre back measure (Fig 26).

Fig 27



- 14 Continue a line below the shoulder blade level along the straight grain, parallel to centre back.
- 15 Press under the 1 inch strip beyond the centre back line.

TASK 5: **Drape the back bodice on the dress form**

- 1 Place the muslin on the form, matching the centre back of the muslin with the centre back of the form (Fig 28).

Fig 28



- 2 Match the neckline mark on the muslin to the neckline on the form.
- 3 Pin the muslin to the neckline at the centre back.
- 4 Place a pin at the centre back waist position.
- 5 Place the muslin so that the shoulder blade level is perfectly parallel to the floor, and pin in place.
- 5 Pin the princess panel position line on to the form (Fig 29).

Fig 29



The princess panel position line will hang perfectly perpendicular to the floor. This line may not look straight because it is angled in toward the waist line, but you can check it with a carpenter's level.

- 6 Trim away the quarter-pie shaped piece of muslin at the back neckline corner, being careful not to cut too deep.
- 7 Clip into the muslin toward the neckline (Fig 30).

Fig 34



This will allow the fabric to fit closely against the neck without any folds or straining.

- 8 Smooth the muslin to fit against the body form neckline without stretching the fabric, and place a pin at the shoulder/neckline intersection.
- 9 Continue smoothing the muslin along the shoulder and place a pin at the centre of the shoulder seam to mark the first notch of the shoulder dart.
- 10 Mark dashed lines along the neckline seam, and make a cross mark at the centre of the shoulder seam.

This position should be the same as it was for the front shoulder seam.

- 11 Mark dashed line from the neck out to the cross mark along the shoulder seam (Fig 31).

Fig 31



The excess muslin above the shoulder blade level will go into a shoulder dart.

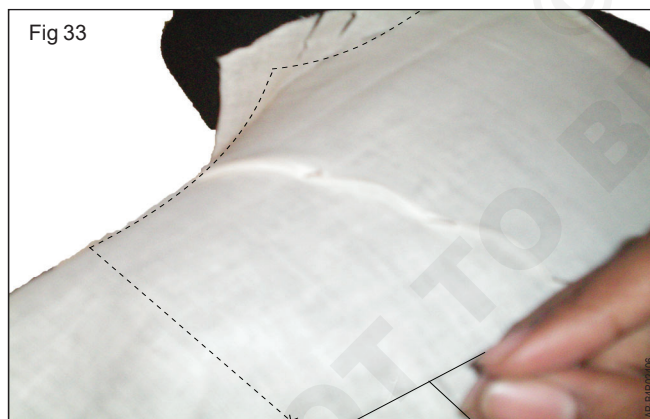
- 12 Make a pencil cross mark 1/2 inch over from the cross mark at the centre of the shoulder to mark the second notch of the shoulder dart.
- 13 Pin the shoulder dart in place with the pins going across the dart until you get to the point where the last pin will go lengthwise (Fig 32).



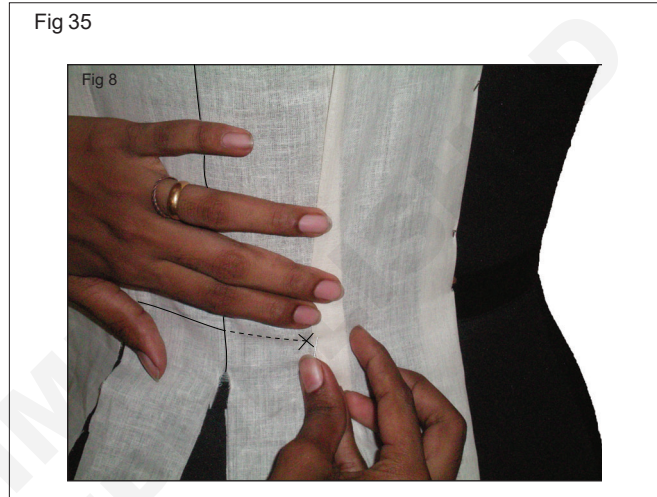
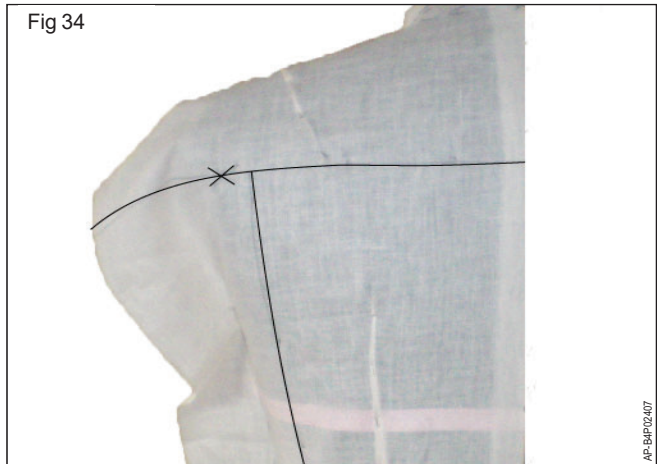
- 14 Draw in the shoulder seam with a pencil, making dashed lines, and cross mark the shoulder tip position.

The shoulder dart folded edge should extend the centre of the shoulder down toward the shoulder blade level. The dart intake/excess is folded under toward centre back.

- 15 Pin the muslin to the form at the underarm/side seam intersection (Fig 33).



- 16 Mark dashed lines along the upper armhole on the ridge of the form and down to the mid-armhole, right along the edge of the armhole plate.
- 17 Cross mark at the underarm/side seam intersection (Fig 34).
- 18 Pin the muslin to the form, along the side seam and at the waist.
- 19 Mark dashed lines along the side seam, and make a cross mark at the waistline.
- 20 Clip the muslin from the bottom edge up toward the waistline (Fig 35)



- 21 Mark dashed lines along the waistline from centre back over to the princess line on the form, and cross mark the princess line.
- 22 Clip the muslin from the bottom edge up toward the waistline and all the way over to the side seam (Fig 36)



- 23 Fold the excess fabric below the shoulder blade level into a waist dart at the princess seam cross mark or dart placement mark.

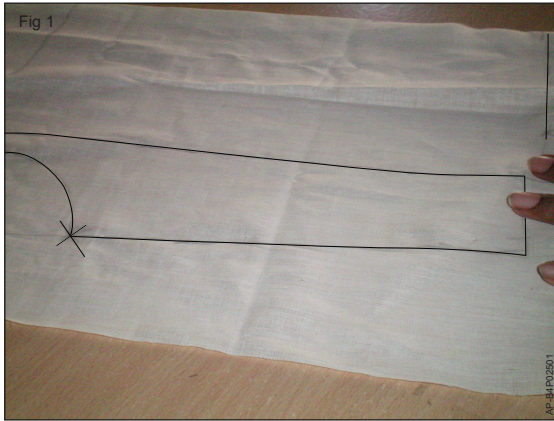
The dart intake/excess will go toward the centre back.

- 24 Make a cross mark at the princess line for the second notch of the dart, and continue marking the waistline with dashed lines.
- 25 Pin the waist dart until you get to the dart point where the pin will go lengthwise.

TASK 7: Prepare the paper pattern

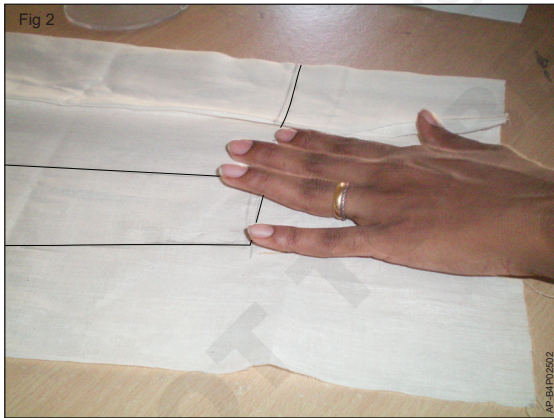
- 1 Take the back bodice muslin off of the form, removing all of the pins (Fig 37)

Fig 37



- 2 Press the muslin flat with the steam iron, keeping the grain lines aligned.
- 3 Add 1/2 inches of ease at the bust level/side seam intersection and 1/4 inch of ease at the waistline/side seam intersection.
- 4 Connect these two marks with a straight line for the new side seam.
- 5 Measure waist dart intake, and make a cross mark halfway between the two notches (Fig 38).

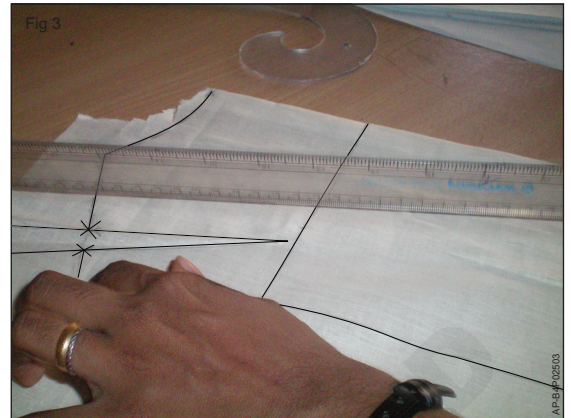
Fig 38



- 6 Continue a line from this cross mark, going up toward the shoulder blade level, perfectly parallel to centre back.
- 7 Cross mark the dart point, which is measured up from the waistline to the same length as the side seam cross marked.
- 8 From the waist dart point, draw the stitch lines for the dart going down to the dart notches.
- 9 Draw a guide line for the French curve placement starting at the armhole dashed lines at the shoulder

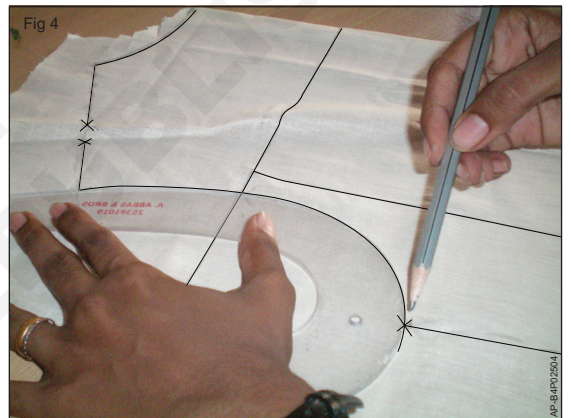
blade level and going down, perfectly to centre back, for about 2 to 3 inches (Fig 39).

Fig 39



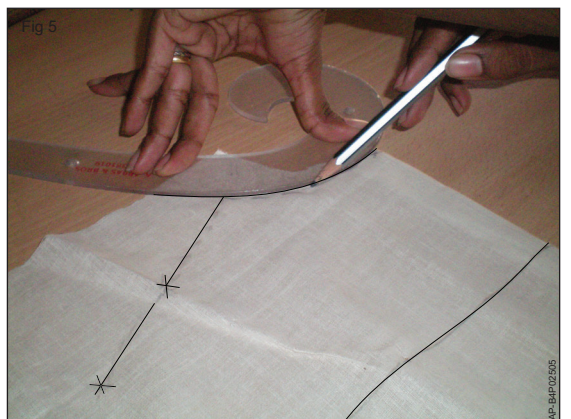
- 10 True the armhole curve using a French curve (Fig 40).

Fig 40



- 11 True the neckline curve by using a french curve (Fig 41)

Fig 41



- 12 Draw a line from the waist dart point up to the first notch of the shoulder dart.
- 13 Measure the length of the shoulder dart for about 3 inches long.

14 Pin the darts closed along the new stitch lines. Draw a straight line with a ruler (Fig 42).

15 Place the hip curve at the waist line by closing the waist dart, to true the actual waistline. (Fig 43)

Fig 42

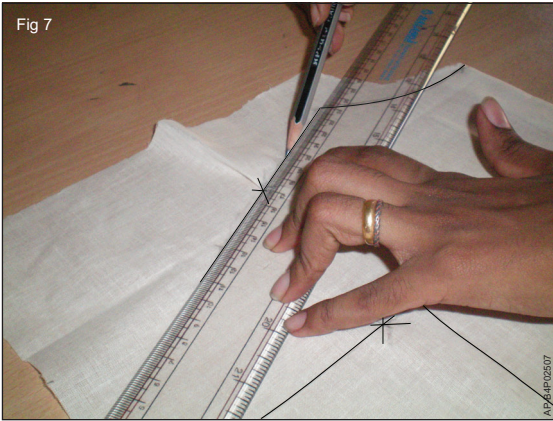
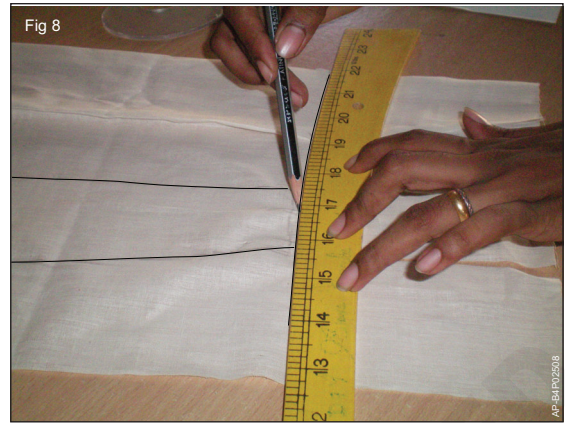


Fig 43



Manipulation technique of dart

Objectives: At the end of this exercise you shall be able to

- manipulate waist dart to centre front waist dart
- manipulate waist dart to French dart
- manipulate waist-side dart
- manipulate mid shoulder-waist dart
- manipulate waist dart to mid neck dart by pivot method
- manipulate waist dart to mid armhole dart by pivot method
- manipulate shoulder tip & waist dart by pivot method
- manipulate centre front neck & waist dart by pivot method.

Requirements

Tools / Instruments

- Measuring tape - 1 No.
- Scissors - 1 No.
- L-Scale ruler - 1 No.
- Ruler paper for patterns - 1 No.
- Pencil or Pen - 1 No.
- Metal weights - 1 No.
- Tracing wheel - 1 No.
- Awl - as reqd.
- Push pins - as reqd.

- Ladies' bodice block front and back pattern size back pattern size - 12 (M- Small)
- Pattern table - 1 No.
- Pattern shears - 1 No.
- Bell pins and push pins - 1 No.

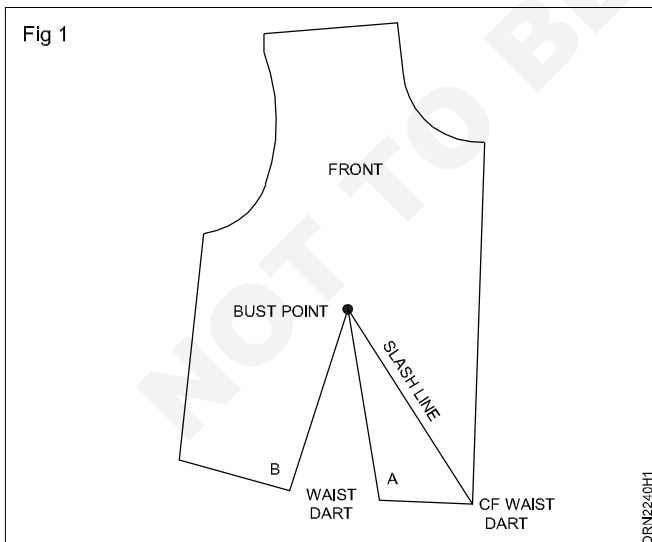
Materials

- Brown papers - as reqd.

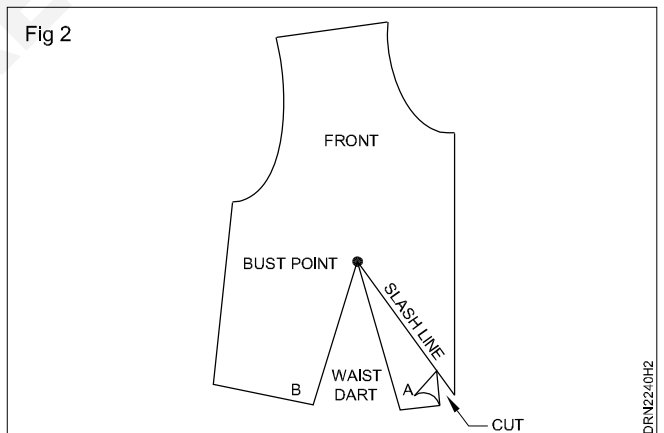
PROCEDURE

TASK 1 : Manipulate waist dart to centre front waist dart

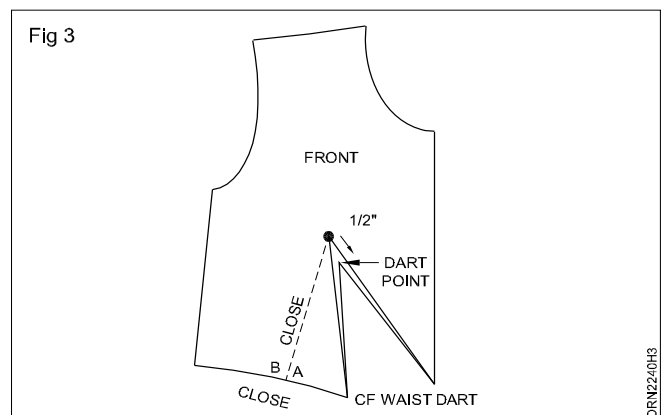
- 1 Trace the charted pattern. Cross dark centre front waist dart. label dart legs A & B.
- 2 Draw slash line from centre front waist to bust point. (Fig 1)



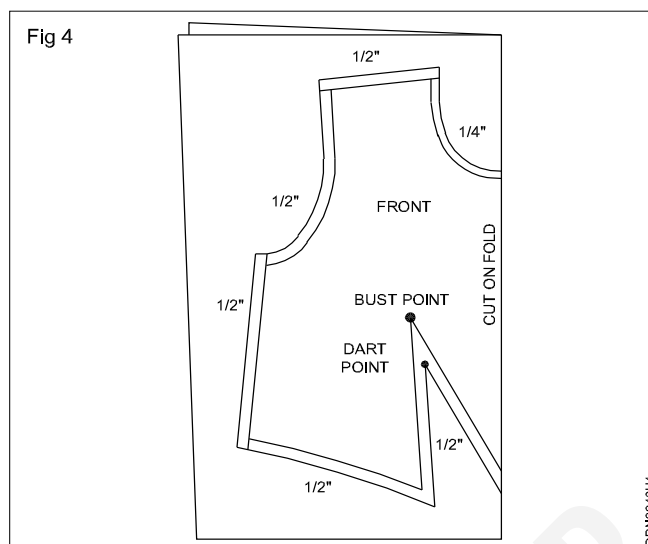
- 3 Slash pattern from centre front waist to, not through, bust point. (Fig 2)
- 4 Close dart legs A&B & Tape the closed line.
- 5 Place pattern on a paper and retrace.
- 6 Down the dart point 1/2 inch from bust point.



- 7 Draw the new dart legs to the dart point and mark it as centre front waist dart. (Fig 3)

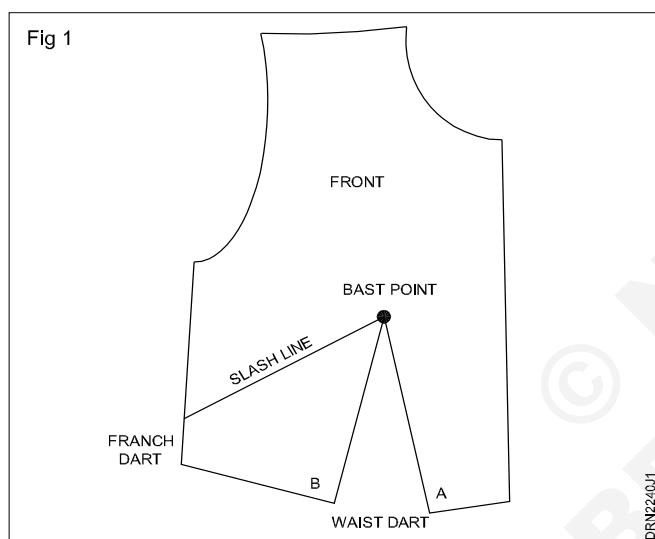


- 8 For test fit, cut on fold for full front, for half-muslin, add 1-inch extension at front -Add seams to pattern or muslin.
- 9 Complete pattern using general pattern information for guidance.
- 10 Stitch, press front and back muslin, place on form or model for a test fit. (Fig 4)

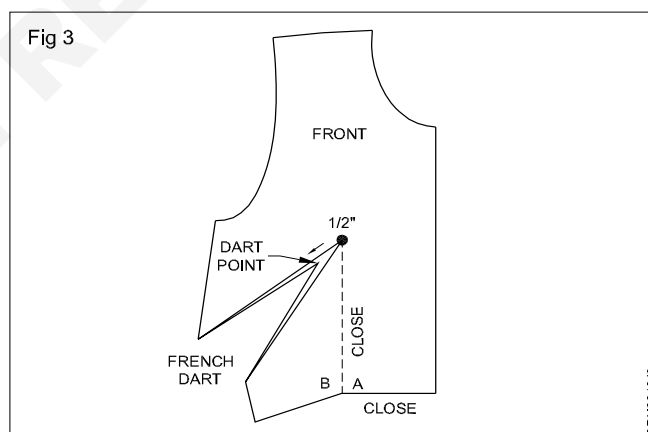
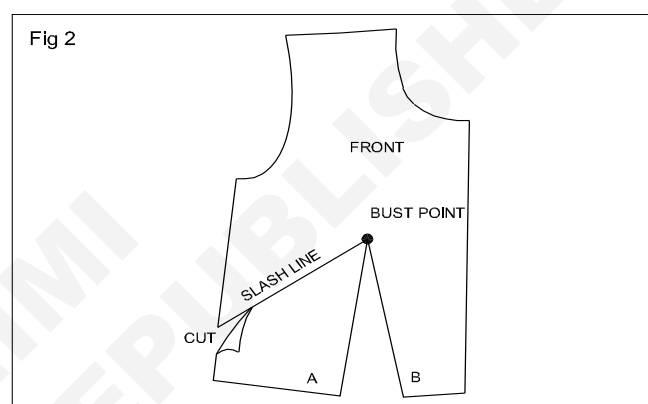


TASK 2 : Manipulate waist dart to French dart (Fig 1)

- 1 Draw a slash line to bust point to form a French dart. (Fig 1)



- 2 Cut slash line to, not through, the bust point. (Fig 2)
- 3 Close the dart legs or waist dart A&B, tape the closed line.
- 4 Retrace and complete the new dart legs to form French dart. (Fig 3)



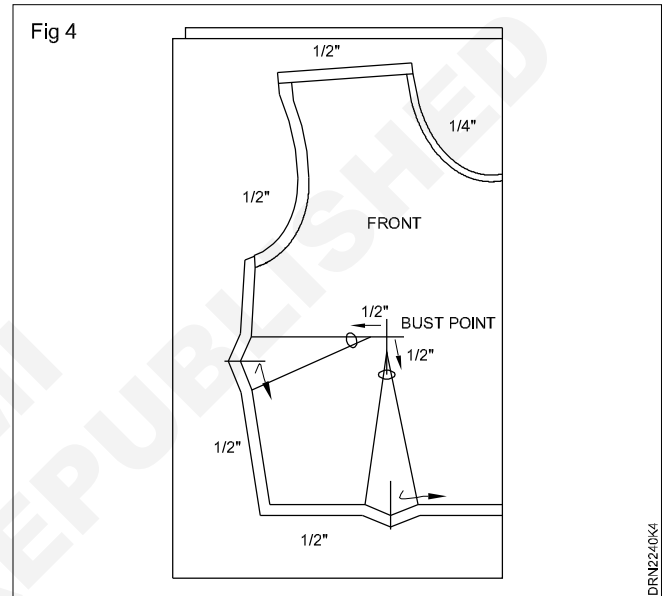
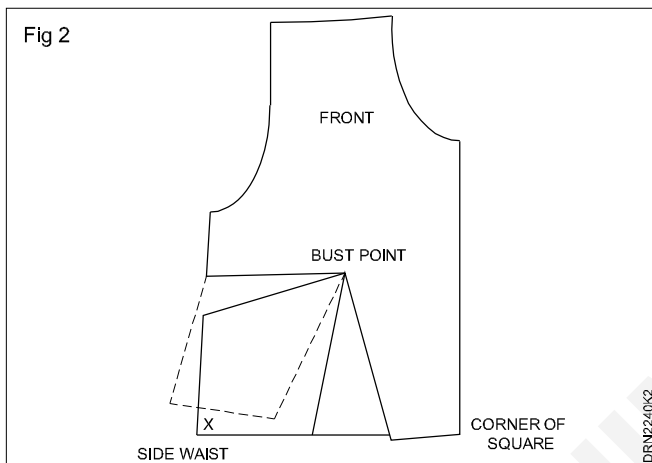
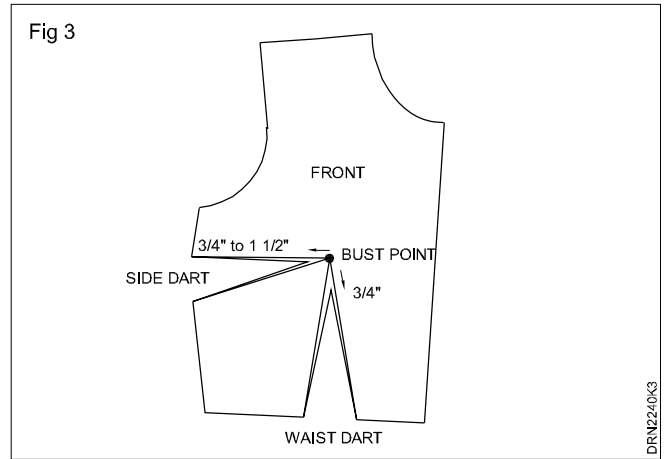
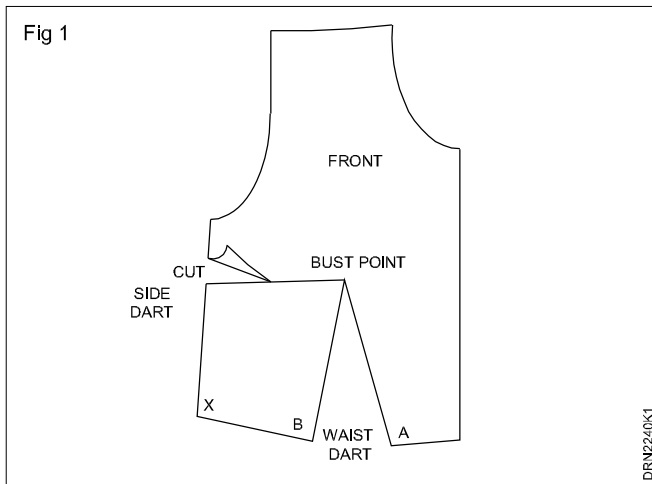
TASK 3 : Manipulate waist-side dart

Waist and side dart: (Two-Dart series) (Fig 1)

- 1 Trace front chart pattern. Cross mark side dart location and draw slash line to bust point.
- 2 Label dart legs A and B and side waist.
- 3 Cut slash line to, not through, bust point (hinge). (Fig 2)
- 4 Draw a square line on a paper.
- 5 Place centre front on square line with centre front waist touching corner as shown.

- 6 Close waist dart until point touches square line. (Broken line is original pattern).
- 7 Trace, Mark bust point. (Fig 3)
- 8 Centre the point of waist dart 3/4 inch from bust and side dart 1 1/4 inches from bust point.
- 9 Redraw the dart legs to dart point.

Test fit: For a full front, cut pattern on fold of muslin. For half of a garment, add 1 inch extension for fold-back at centre front/back.



10 Add seams as shown.

11 Side dart - centre fold lies towards waist.

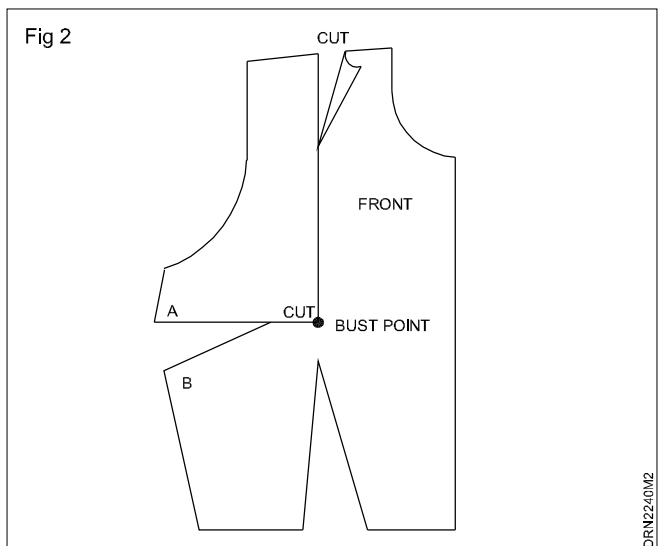
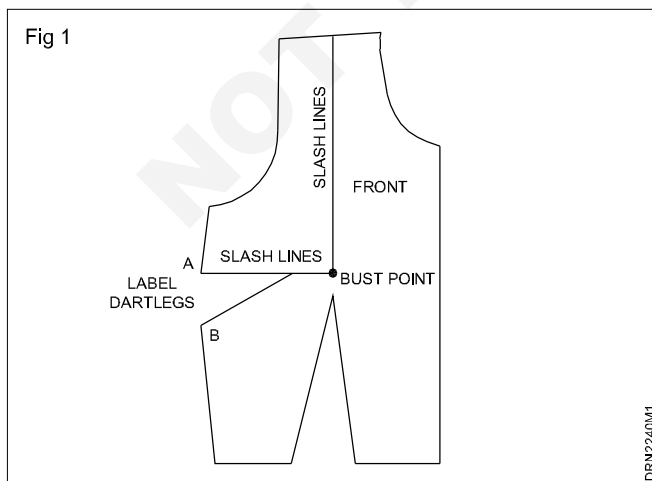
12 Waist dart - centre fold lies towards centre front.

13 Stitch, press and place on form or model for test fit.
(Fig 4)

TASK 4 : Manipulate mid - Shoulder & Waist Dart

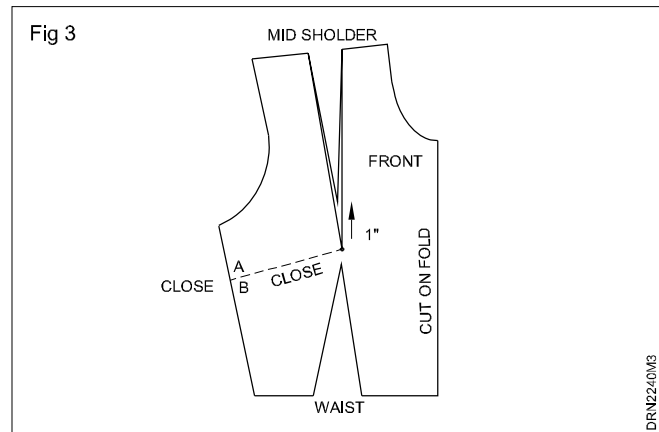
1 Trace pattern, mark bust point and mid-shoulder line.
(Fig 1)

3 Cut slash line to, not through, bust point. (Fig 2)



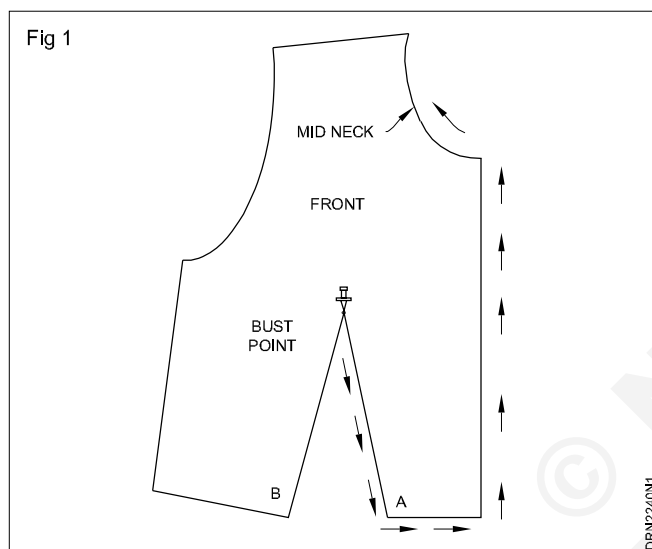
2 Draw slash line to bust point from mid-shoulder and from dart point of side dart to bust point.

- 4 Close dart legs A and B, tape the closed portion accordingly.
- 5 Trace the silhouetting of pattern.
- 6 Mark centre dart point 1 inch from bust point.
- 7 Draw new dart legs to the dart point to form mid-shoulder dart. (Fig 3)

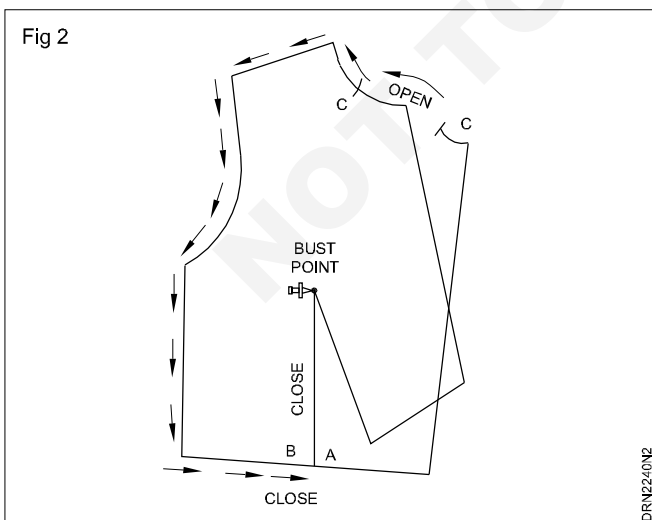


TASK 5 : Manipulate waist dart to mid-neck dart

Mid -Neck Dart: (Single dart series) (Fig 1)

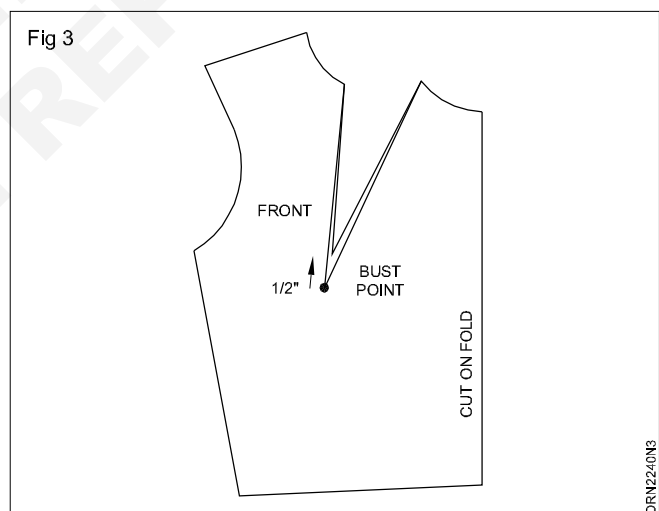


- 1 Place the working pattern on paper with a push ping through bust point. (pivotal point)
- 2 Mark mid-neck location (point c) and dart leg A on a paper. (Fig 2)



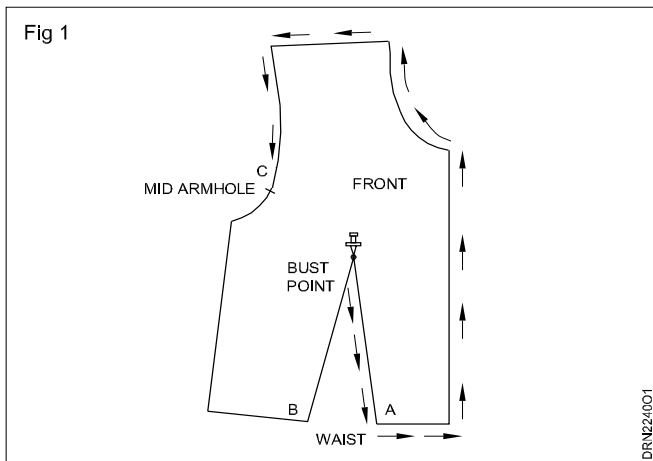
- 3 Trace section of pattern from dart leg A to C, by following till the arrow mark ends from the, bust point.
- 4 Pivot pattern until dart leg B touches A on paper. (close waist darts and open space for mid-neck dart.)
- 5 Trace remaining section of the pattern from dart leg B to point C on pattern by following the arrow marks.

Whenever the pattern is pivoted, it will overlay the previously traced pattern section. This is a natural occurrence. Remember, once a section of the pattern is traced, it is not traced again. (Fig 3)

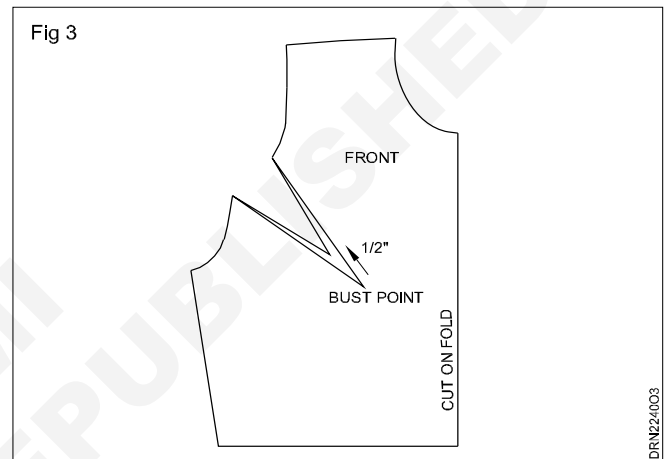
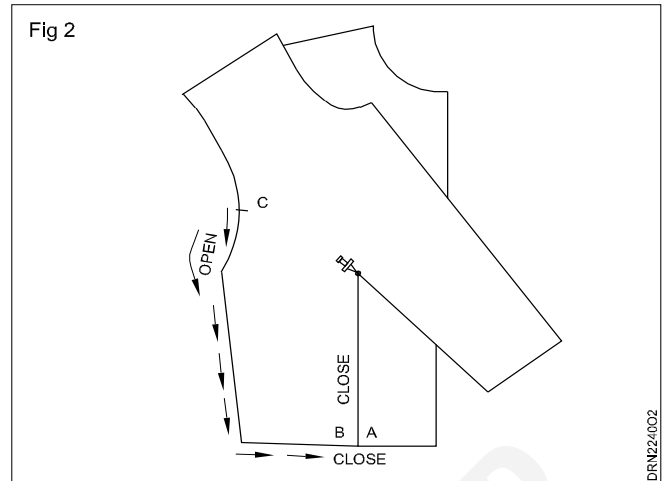


- 6 Remove the working pattern from paper.
- 7 Draw dart legs to bust point.
- 8 Mark centre dart point 1/2 inch from bust point.
- 9 Redraw the dart legs to dart point.
- 10 Cut in muslin for test fit.

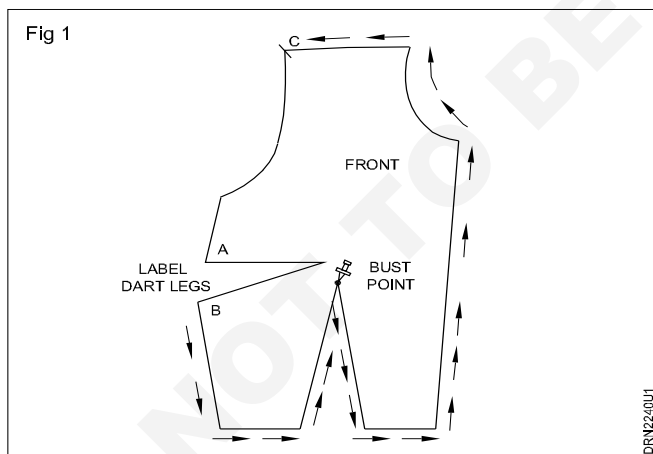
TASK 6 : Manipulate mid-Armhole dart (Fig 1)



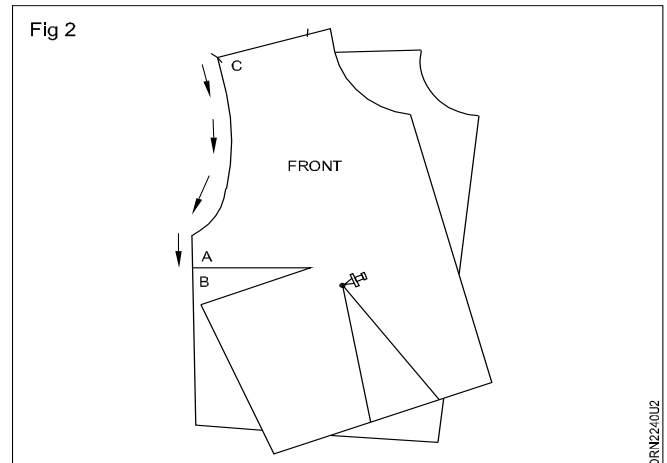
- 1 Mark new dart location and trace the pattern from A to C, by following the arrows.
- 2 Pivot pattern until dart leg B touches point A on paper. (close waist dart and open space for mid-armhole dart.)
- 3 Trace remaining pattern by following through arrow marks.(Fig 1)
- 4 Remove pattern, draw new legs to bust point and centre the dart point 1/2" from past point.(Figs 2 & 3)



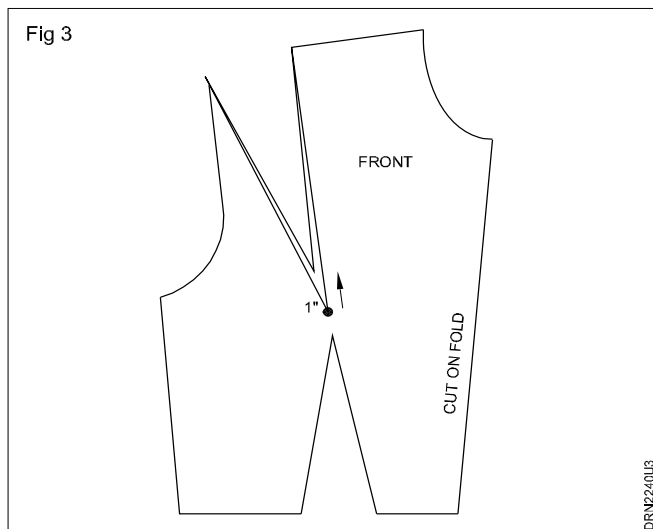
TASK 7 : Manipulate shoulder-tip and waist dart: (Two-dart series) (Fig 1)



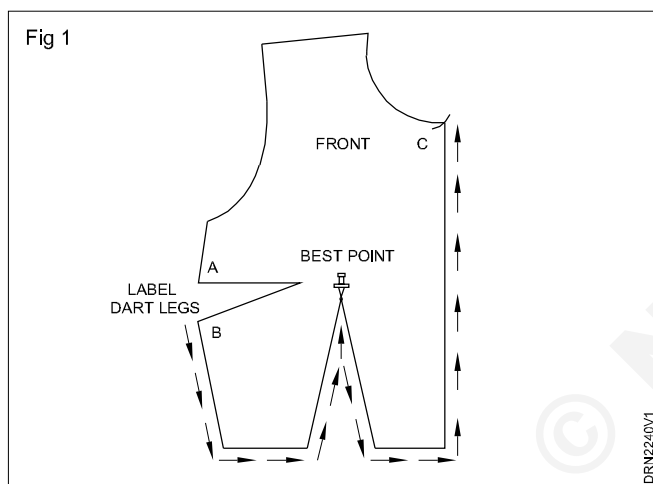
- 1 Place pattern on paper with push pin through the bust point. Mark shoulder tip dart as C.
- 2 Mark at dart leg B and trace to point C. By following till the arrow mark ends. (Fig 2)
- 3 Pivot pattern down ward until dart leg A touches B on paper.



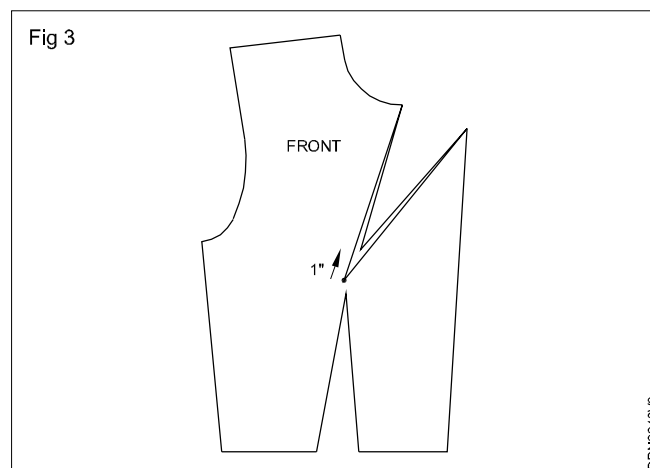
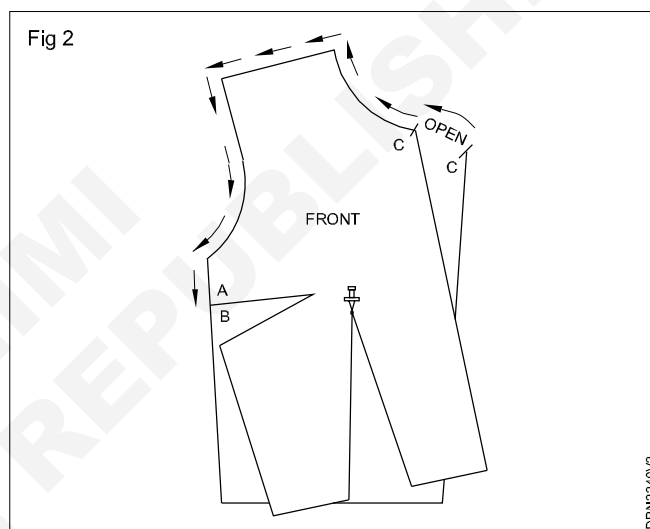
- 4 Mark point C at shoulder tip and trace to dart leg A, by following the arrows.
- 5 Remove pattern, draw dart legs to bust point.
- 6 Mark center dart point 1 inch from the bust and redraw legs to dart point. (Fig 3)



TASK 8 : Manipulate centre front neck and waist dart (Fig 1)



- 1 Place pattern on paper with pushpin through bust point. Mark centre front neck dart as C.
- 2 Mark at dart leg B and trace to point c, or by following the arrow marks
- 3 Pivot pattern downward until dart leg A touches B on the paper.
- 4 Mark point C at neck and trace to dart leg A, by following the arrows. (Fig 2)
- 5 Remove pattern, draw dart legs to bust point.
- 6 Mark center dart point 1 inch from bust and redraw legs to the dart point. (Fig 3)



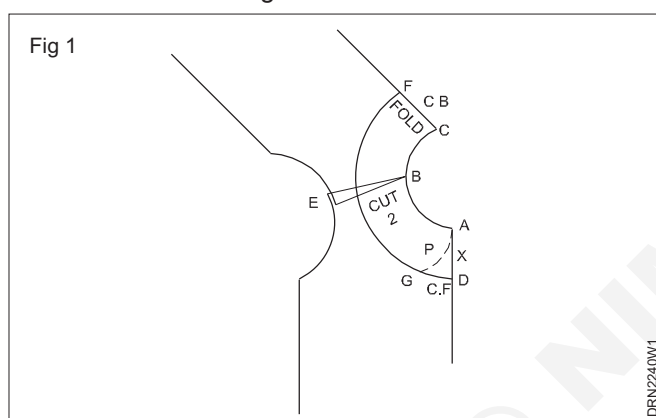
Manipulation technique of collar

Objectives: At the end of this exercise you shall be able to

- prepare pattern for one piece peter pan collar
- prepare pattern for two piece peter pan collar
- prepare pattern for partial roll peter pan collar
- prepare pattern for cape collar
- prepare pattern for scalloped collar
- prepare pattern for puritan collar
- prepare pattern for sailor collar
- prepare pattern for square collar
- prepare pattern for turtle neck collar
- prepare pattern for shawl collar.

TASK 1 : Preparing pattern for one piece peter pan collar

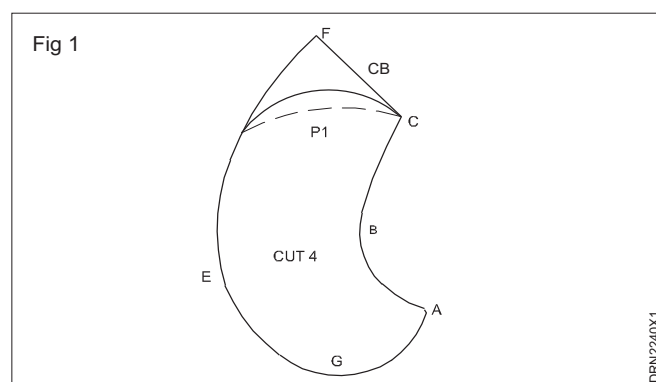
- 1 Keep the front and back bodice pattern together on a paper, with neck points of shoulder lines touching and with the patterns overlapping $\frac{1}{4}$ " near the armhole as illustrated in the Fig 1.



- 2 Trace the outline of the upper part of the bodices.
- 3 Label the front neck line as TS and back neckline as SR.
- 4 Now mark D, E, F, 1 $\frac{1}{2}$ " to 2" away from T, S and R respectively.
- 5 Join DEF as shown, and round off the collar in the front through P.
- 6 Mark a notch at S, to indicate shoulder point.
- 7 Add Seam allowances all the sides.
- 8 Label the collar as shown and cut out the collar pattern.

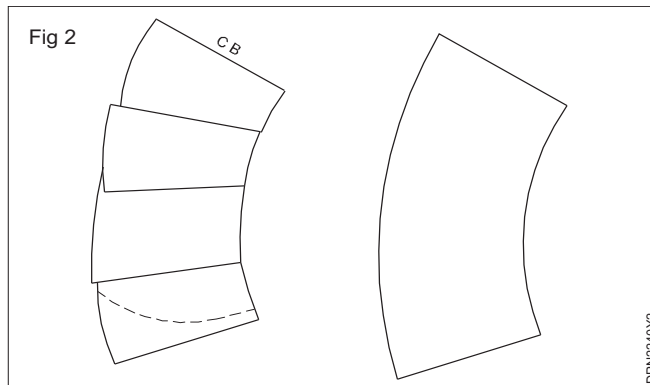
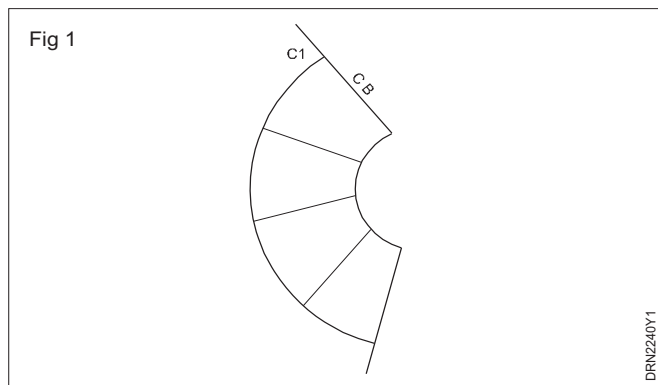
TASK 2 : Preparing pattern for two pieces peter pan collar

- 1 To prepare the pattern, take the one piece Peter Pan collar pattern and round off the collar at the back through point P1 as shown in the Fig 1.
- 2 Add Seam allowances all the sides.
- 3 Label the collar as shown.



TASK 3 : Prepare pattern for partial roll peter pan collar

- 1 Take the pattern of the One piece peter pan collar and draw three slash lines from outer edge of the collar to neckline as shown in Fig 1.
- 2 Slash along these lines from outer edge and overlap the outer edge above $\frac{1}{4}$ " to $\frac{1}{2}$ " at each slash and pin as shown in Fig 2.
- 3 Reshape the outline.
- 4 Prepare a neat pattern by keeping this on another paper and tracing the outline.



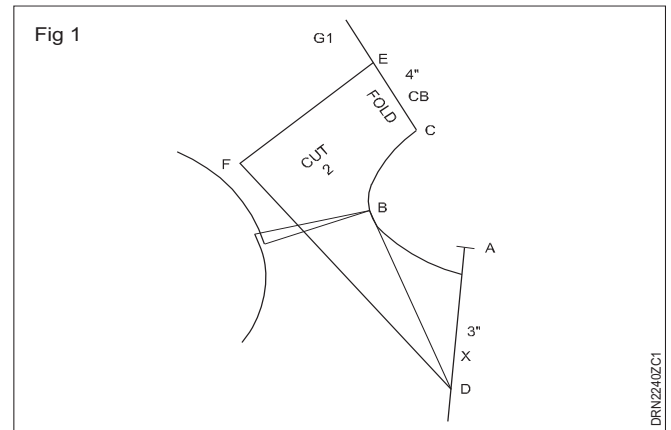
TASK 4 : Prepare pattern for cape collar

TASK 5 : Prepare pattern for scalloped collar

TASK 6 : Prepare pattern for puritan collar

TASK 7 : Prepare pattern for sailor collar

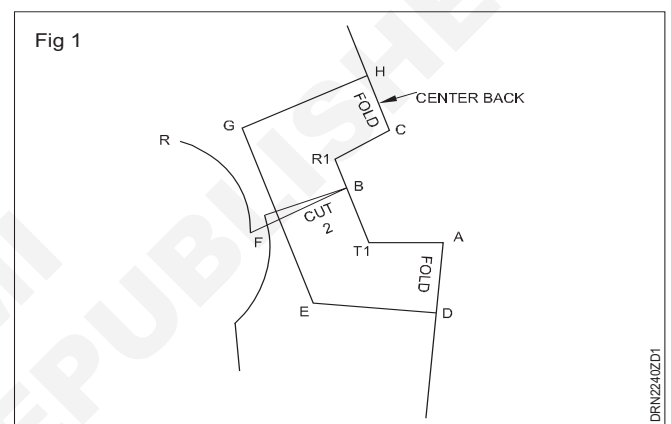
- 1 Modify the neckline to V shape by marking D in the front pattern, 3" to 4" below A and connect BD.
- 2 Now trace on a sheet of paper the neck line area of back and modified front bodice patterns after overlapping the shoulder points near the armhole by 1/2" to 1".
- 3 Draw the style line HED for the outer edge of the collar as shown in the Fig 1.
- 4 Add seam allowance.



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TASK 8 : Prepare pattern for square collar

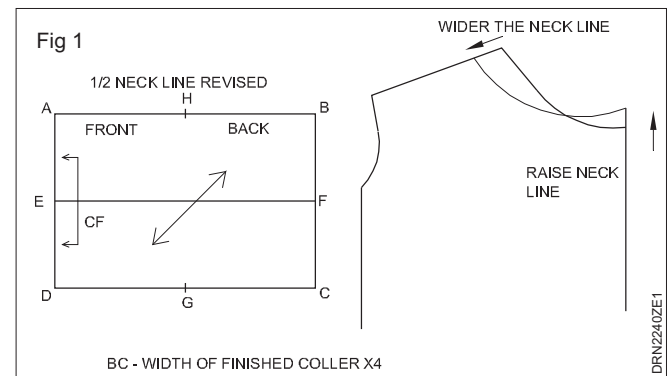
- 1 Modify the neck lines of the bodice patterns to square shape.
- 2 Trace the neck line area on a paper and draw the style line DEGH for the outer edge of the collar as shown in Fig 1.
- 3 Apply the width of the collar 1 1/2" to 2 1/2".
- 4 Add seam allowance all the sides.



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TASK 9 : Prepare pattern for turtle neck collar

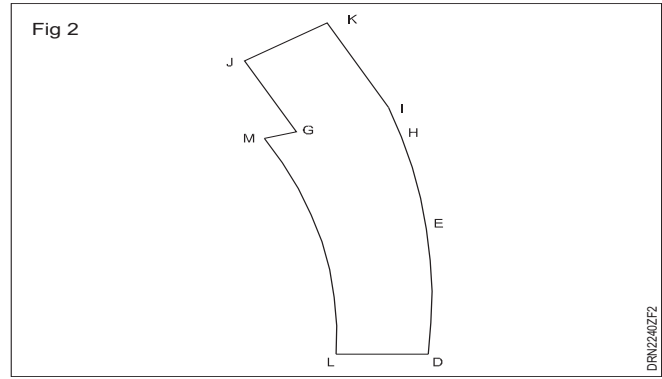
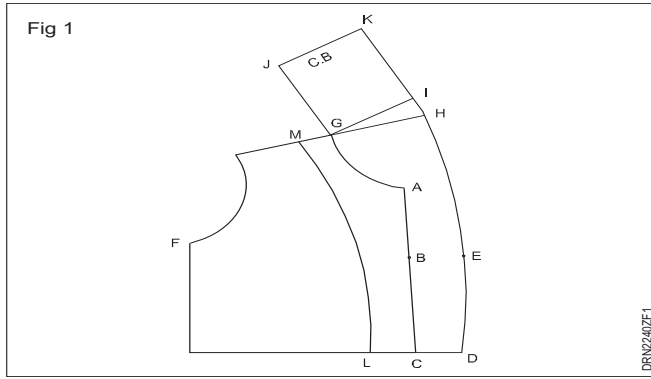
- 1 Raise the neck line by 1/4" to 2" at center front or make the neck wider by making the shoulder narrower.
- 2 Draw a rectangle ABCD with AB = 1/2 neck measurement (remember to take neck measurement along the altered neck line) and BC = 4 times the width of the finished collar when folded down = 4 X 1 1/2 = 6".
- 3 Mark E and F, midpoint of AD and BC, and label line EF as fold line.
- 4 Mark a notch on CD to indicate the shoulder point.
- 5 Label line AD as center front and fold line.
- 6 Mark the grain line as shown in the Fig 1.



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TASK 10 : Prepare pattern for shawl collar

- 1 Trace the bodice front on a large sheet of paper. On the center front line AC locate the position of the top button at B.
- 2 Add center front extension of 3/4" by ruling line PF, 3/4" away from OE and parallel to it.
- 3 Extend the shoulder line SA by 3" to 4" to point G.
- 4 Mark D, 1/2" above G. Now draw rectangle ABCD with AB = half the length of the back neck curve.
- 5 Draw line DF to form the collar label. (Fig 1).
- 6 To prepare the collar facing, mark OY = AX = 1 1/2" to 2".
- 7 Trace on to another paper the collar facing EHIKJG.



- 8 Finish the Facing pattern as shown in Fig 2.
- 9 Add Seam allowances for both bodice and facing patterns.

Get the work checked by your Instructor.

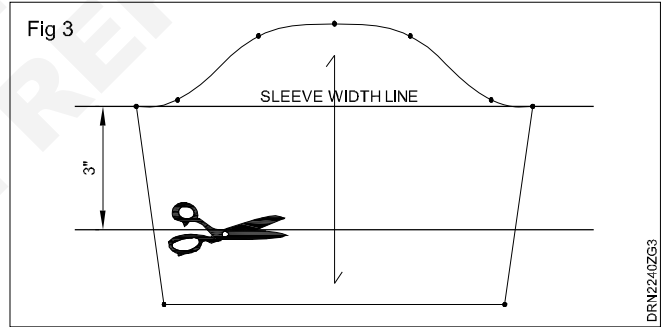
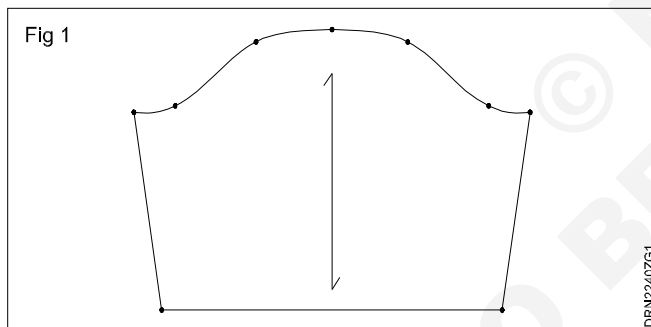
Manipulation technique of sleeve

Objectives: At the end of this exercise you shall be able to

- prepare pattern for basic plain short sleeve using adaptation method
- prepare pattern for puff sleeve gathered at top and bottom
- prepare pattern for puff sleeve gathered at top only
- prepare pattern for puff sleeve gathered at bottom only
- prepare pattern for leg o' mutton sleeve.

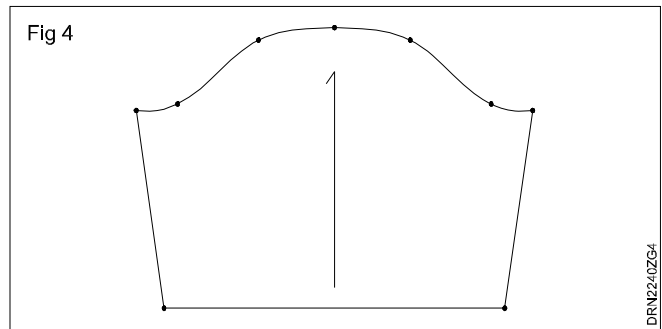
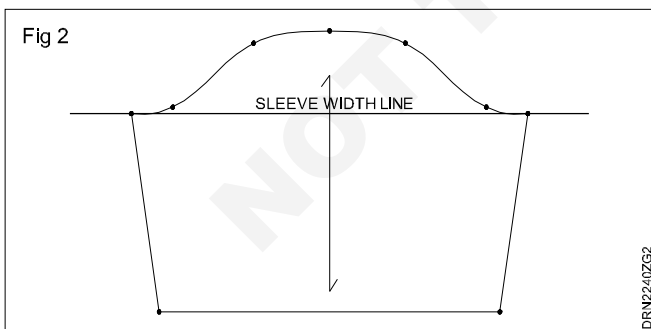
TASK 1 : Prepare pattern for basic plain short sleeve using adaptation method

- 1 Trace the ladies' sleeve block up to elbow line in a brown sheet to get the plain sleeve. (Fig 1)
- 3 Draw another line 3" below sleeve width line. Cut the pattern on the line. (Fig 3)



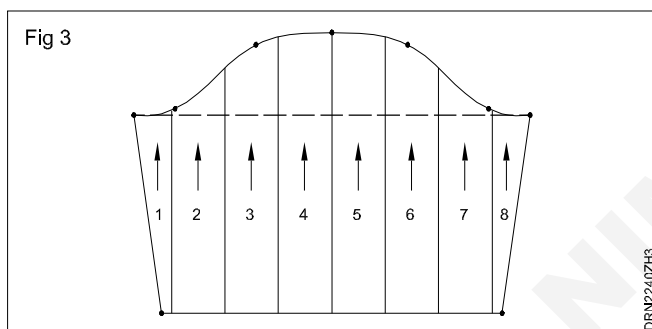
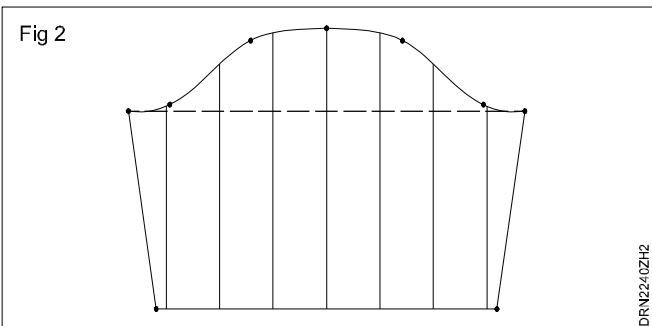
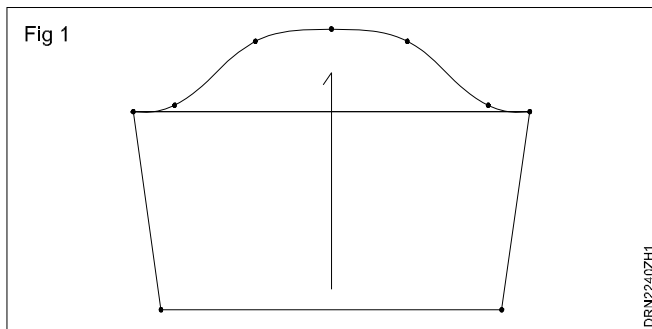
- 2 Draw the line on sleeve width. (Fig 2)

- 4 Draw the grain line. (Fig 4)

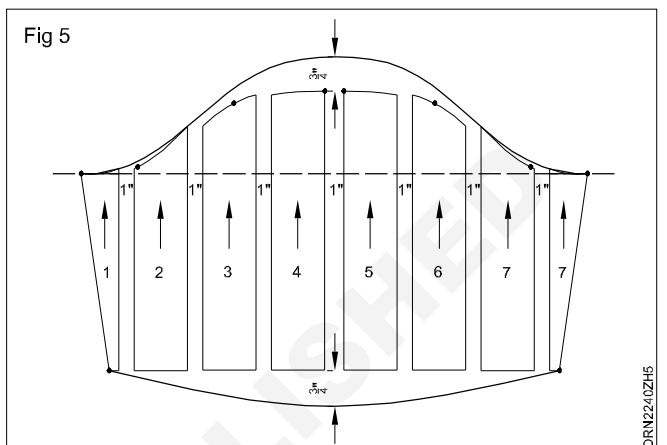
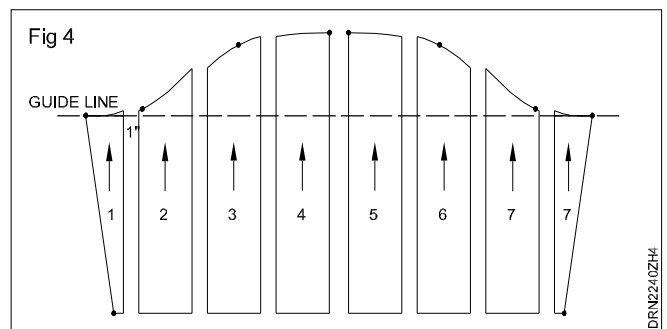


TASK 2 : Prepare pattern for puff sleeve gathered at top and bottom

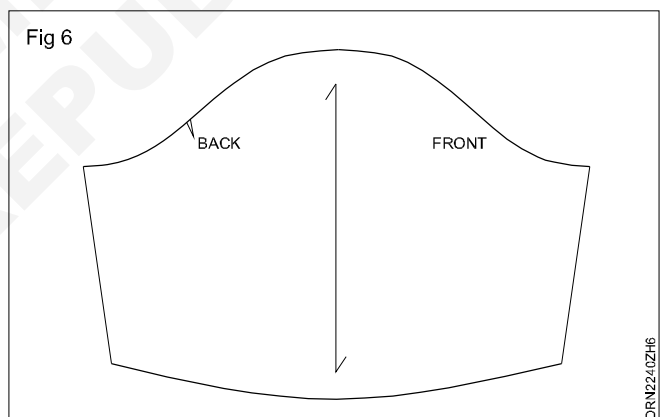
- 1 Trace the basic plain short sleeve pattern in a brown paper. Draw the sleeve width line as Guide line. (Fig 1)
- 2 Divide the Sleeve width in to 8 equal parts and draw slash lines. (Fig 2)
- 3 Draw arrow identification marks to indicate the top portion of the sleeve. Give notations like 1,2,3 for each part. (Fig 3)



- 4 Cut right through all the slash lines.
- 5 Take another brown paper and draw a guide line.
- 6 Spread the slashed patterns at the required distance (for example 1") on the brown paper by matching the patterns guide line with paper guide lines. (Fig 4)
- 7 Secure the patterns on the paper with push pins.
- 8 Redraw adding $\frac{3}{4}$ " extra length at top and bottom as shown in the figure. (Fig 5)

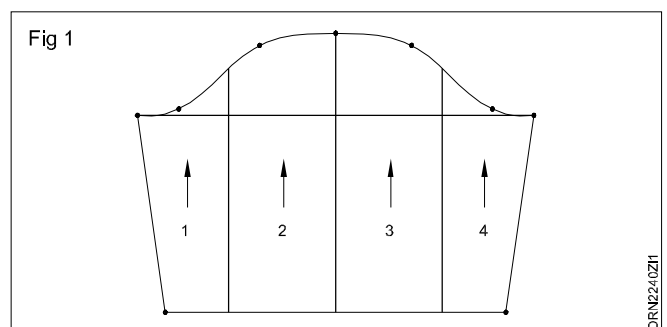


- 9 Draw the grain line and finish the pattern. (Fig 6)

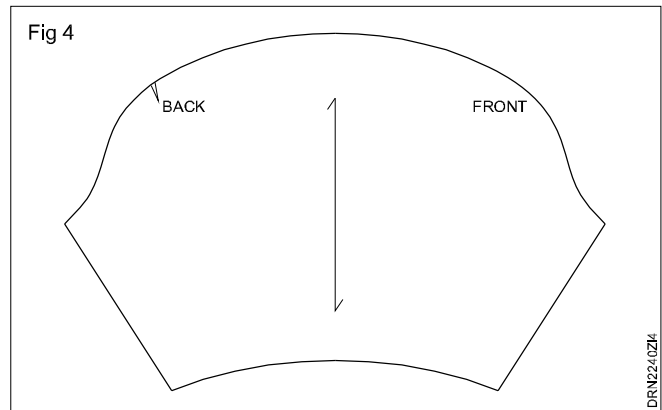
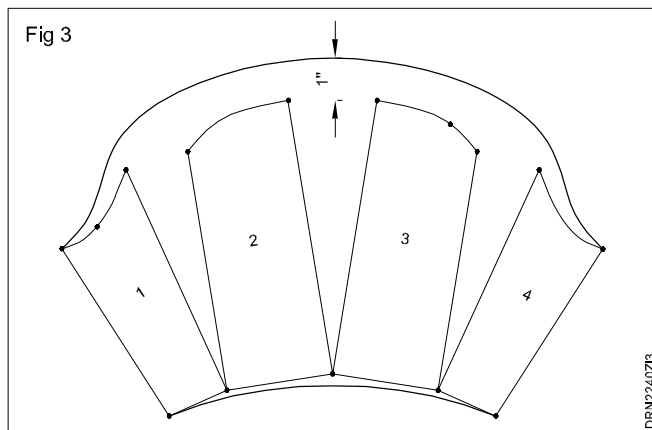
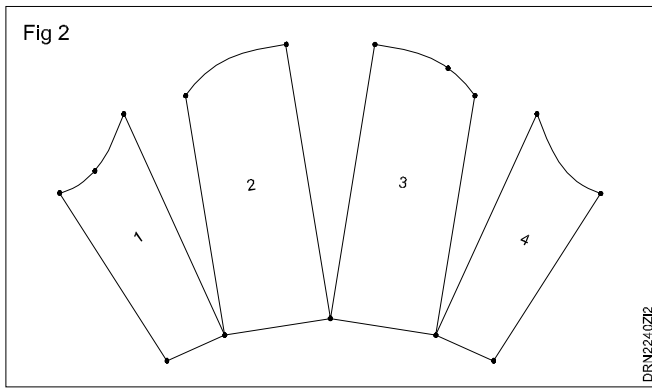


TASK 3 : Prepare pattern for puff sleeve gathered at top only

- 1 Trace the basic plain short sleeve pattern in a brown paper. Draw the sleeve width line as Guide line.
- 2 Divide the Sleeve width in to 4 equal parts and draw slash lines.
- 3 Draw arrow identification marks to indicate the top portion of the sleeve. Give notations like 1,2,3 for each part. (Fig 1).
- 4 Cut the patterns and slash along the lines from top to almost near the bottom edge.
- 5 Keep the slashed pattern on another sheet of paper and spread open the upper edge the required amount of fullness as shown (Fig 2)
- 6 Secure the patterns with paper with pins.

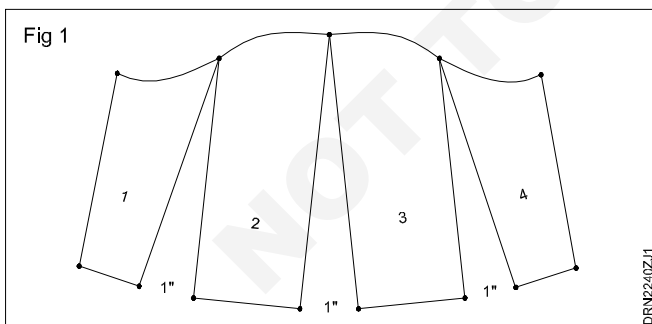


- 7 Increase the length of the sleeve by 1" as shown for puffing. (Fig 3)
- 8 Draw the outline of the new sleeve on the new sheet of paper. Draw the grain line. (Fig 4)

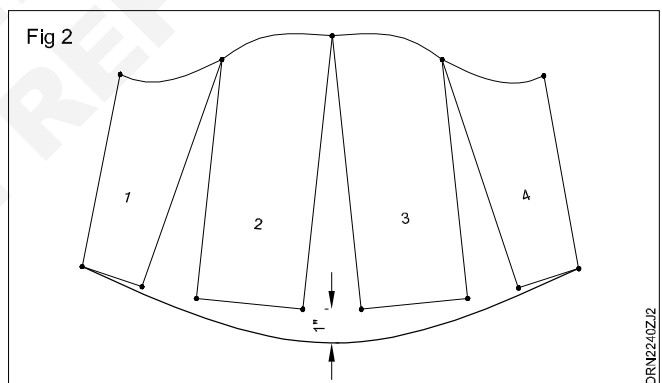


TASK 4 : Prepare pattern for puff sleeve gathered at bottom only

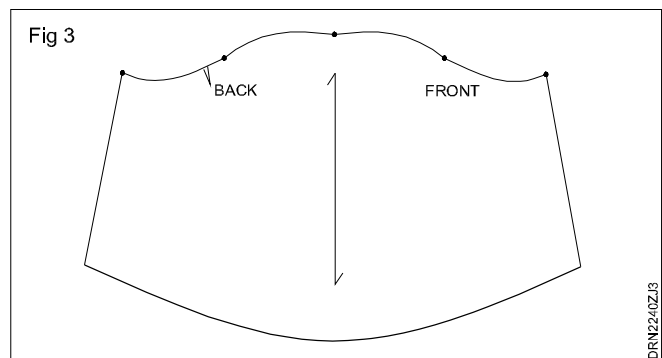
- 1 Trace the basic plain short sleeve pattern in a brown paper. Draw the sleeve width line as Guide line.
- 2 Divide the Sleeve width in to 4 equal parts and draw slash lines.
- 3 Draw arrow identification marks to indicate the top portion of the sleeve. Give notations like 1,2,3 for each part.
- 4 Cut along the slash lines on the pattern from bottom upwards and spread open the lower edge.(Fig 1)



- 5 Secure the patterns with pins.
- 6 Lengthen the sleeve about 1" for puffing as shown. (Fig 2)
- 7 Reshape the sleeve crown.

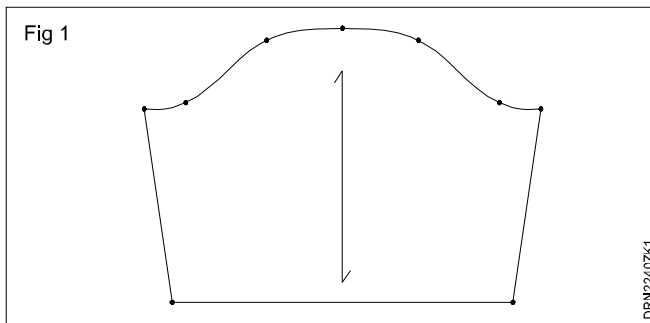


- 8 Complete the pattern by drawing grain line. (Fig 3)

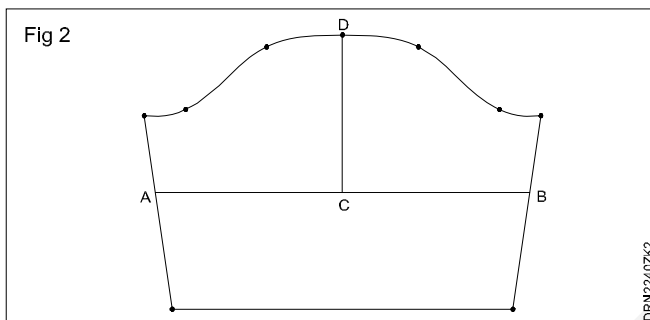


TASK 5 : Prepare pattern for leg o' mutton sleeve

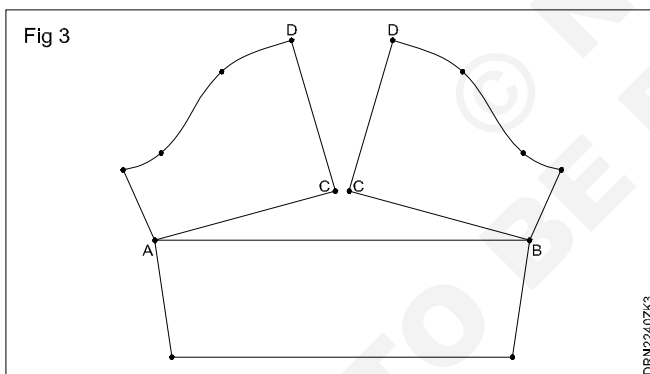
- 1 Trace the Full Sleeve block pattern in a paper without elbow dart. (Fig 1)



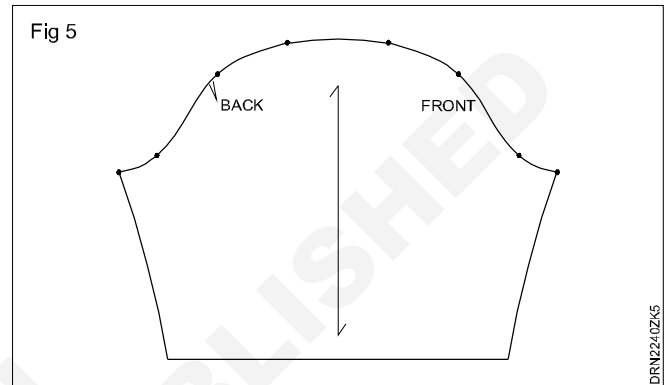
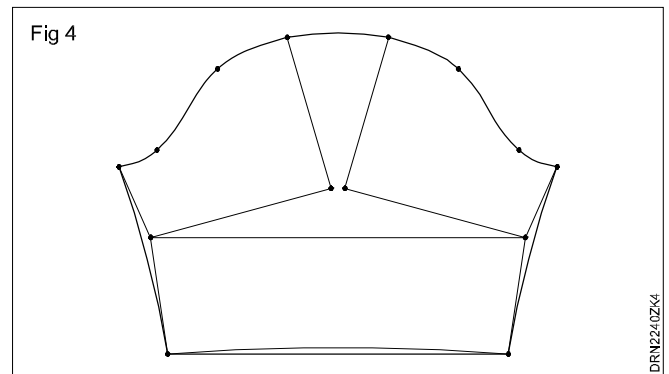
- 2 Draw line AB (elbow line) as shown in Fig 2. Now draw CD through middle of sleeve.



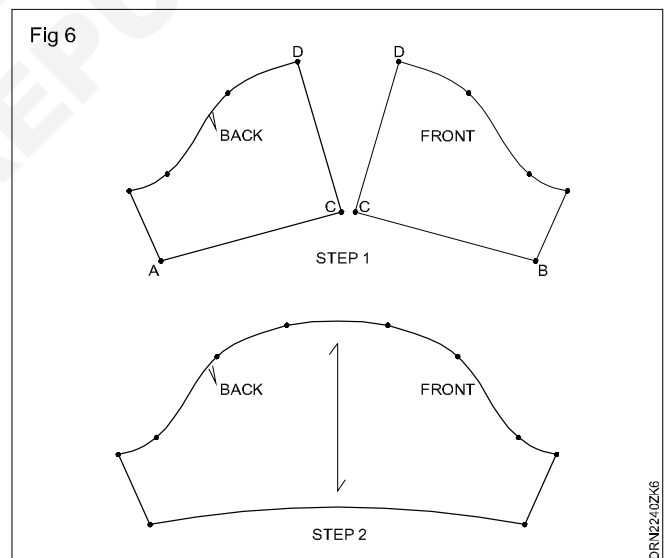
- 3 Slash along AB and CD and spread the top edge apart according to the requirement as shown in Fig 3.



- 4 Complete the pattern by joining the gap of the pattern. (Fig 4)
- 5 Complete the pattern by drawing the grain line. (Fig 5)



- 6 Prepare pattern for leg o' mutton sleeve using Plain short sleeve pattern also. (Fig 6)



Practice on operation of double needle machine

Objectives: At the end of this exercise you shall be able to

- identify the major parts of double needle lock stitch machine and their uses
- wind the lower thread (bobbin) and place bobbin case into lower assembly
- install the bobbin into rotary hook
- remove the bobbin on rotary hook latch
- thread the upper thread
- adjust the stitch length
- identify the corner sewing method
- back tack and adjust the tension of upper and lower thread
- practice stitches per length on different material.

Requirements

Tools / Instruments

- Sewing thread - 1 No.
- Scissors - 1 No.
- Trimmer - 1 No.
- Marking chalk - 1 No.

- Machine tape - 1 No.
- Bobbin - 1 No.

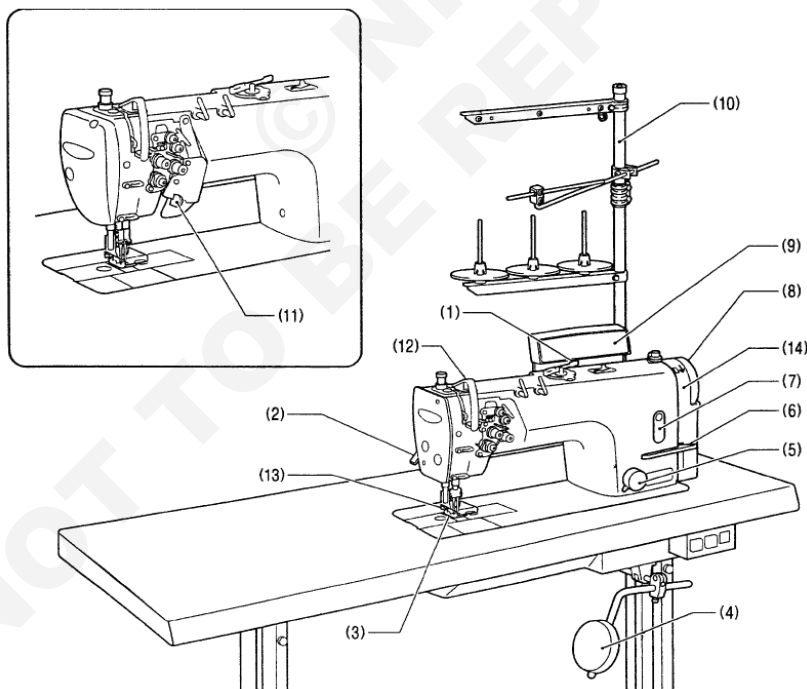
Machine

- Sewing machine - 1 No.

PROCEDURE

TASK 1 : Identify the major parts of the double needle lock stitch and their uses (Fig 1)

Fig 1

**1 Bobbin winder (1)**

- Wind the Bobbin by placing the Bobbin into Bobbin winder wind around 40 meters of sewing thread.
- Ensure the bobbin should not be loaded too much.

2 Lifting lever (2)

- Hand lifter used for lifting the presser foot by hand, while the m/c in ideal condition, use the hand lifter lever.

3 Presser foot (3)

- Presser foot mainly used for hold the fabric during stitching performance.

4 Knee lifter assembly (4)

- Knee lifter is used for lifting the presser foot, ensure. While stitching the knee should not touch the knee lifter. Knee lifter used for to keep the material under the presser to remove the fabric under the needle.

5 Stitch length dial (5)

- It used to maintain the length of stitch as per the fabric. While changing the length of stitch turn the regulator with the right hand and left hand hold the back tack lever.

6 Reverse lever (6)

- It is a reinforcement stitch, used to increase the stitch strength in the end or beginning.

7 Oil gauge window (7)

- It indicates the flow of oil to the internal parts of the machine.

8 Machine pulley (8)

- The diameter of the pulley decides the speed of the sewing machine. The decreasing the size of pulley indicate high speed of machine

9 Alarm display (9)

- It is used to indicate the setting machine stitches and also type of setting is available

10 Cotton stand (10)

- To hold the spool thread. Cotton thread is placed to avoid the vibration of machine.

11 Stop lever (11)

- Stop lever is used to stop the motion of the needle.

12 Thread – take lever cover (12)

- It is used to avoid the accident during the sewing the window glass is placed in a machine thread take up lever.

13 Finger guard (13)

- Safe guard to prevent the finger going under the needle.

14 Belt cover (14)

- To prevent the accident during sewing the belt has cover.

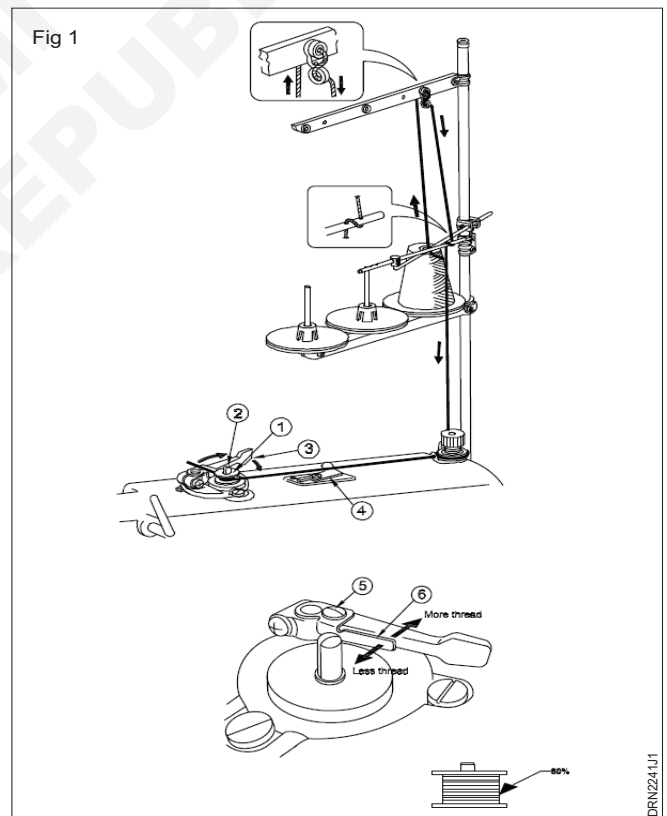
TASK 2 : Wind the bobbin for the lower assembly

- 1 While winding the bobbin ensure that power switch is off as shown in the Fig 1.

Place the bobbin on to the bobbin winder shaft. (Fig 1 Pt: 1 and 2)

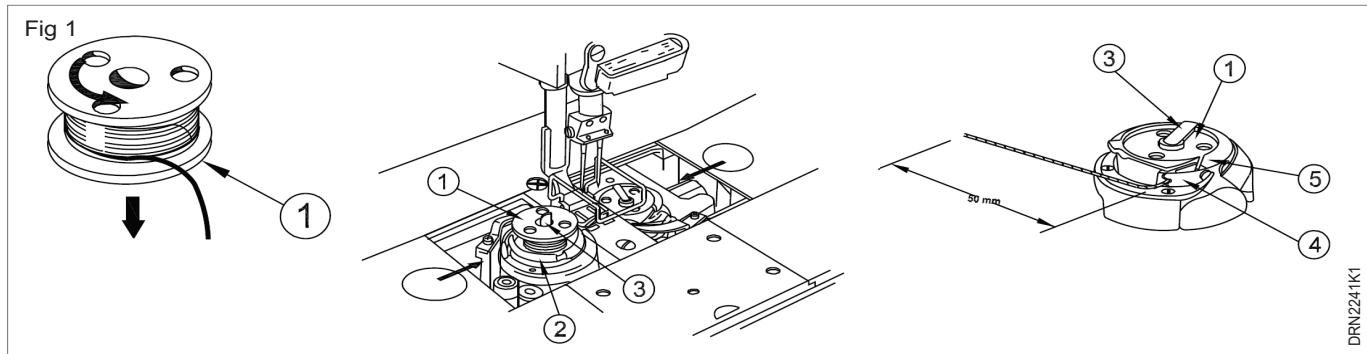
- 3 Wind the thread several times around the bobbin as the direction indicated by arrow. (Fig 1 Pt:3)
- 4 Push the bobbin presser arm towards the bobbin. (Fig 1 Pt.4)
- 5 Raise the presser foot with the lifting lever. (Fig 1. Pt.5)
- 6 Depress the thread, lower thread winding then start. (Fig 1 Pt:6)
- 7 Winding of lower thread is completed the bobbin press arm will return automatically to its position.
- 8 Bobbin thread has been wound on the bobbin remove the bobbin, cut the thread with the help of the trimmer.

Fig 1



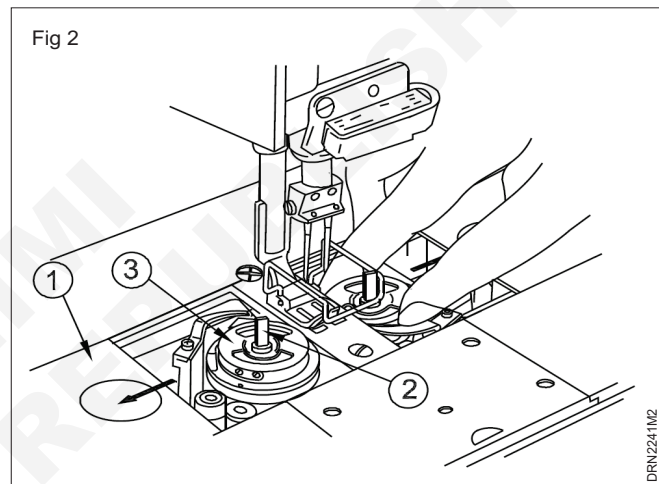
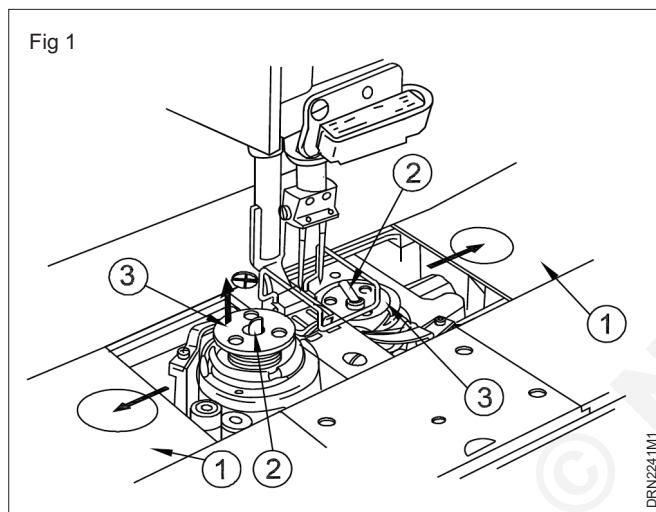
TASK 3 : Install the bobbin into rotary hook

- 1 Take the bobbin, open the rotary hook then place the bobbin into rotary hook.
- 2 Turn the Rotary hook latch to its original position.
- 3 Turn the machine pulley to rotate the rotary hook until the tension spring is visible.
- 4 Pass the thread through slit into the rotary hook and then pass it under the tension (thread) spring.
- 5 Pull out the thread to a length of approximately 50mm.
- 6 Close the slide plate.
- 7 Rotate the pulley and bring the bobbin thread to the top with the help of the needle. (Fig 1)



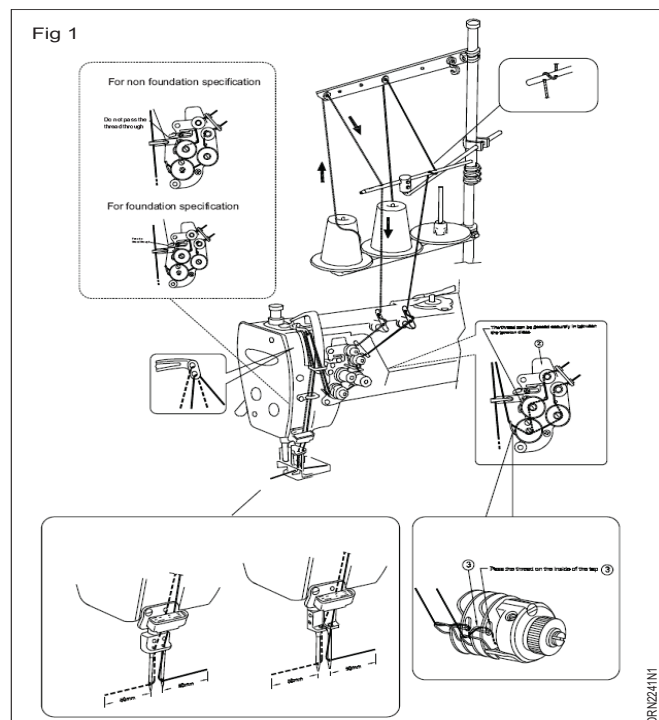
TASK 4 : Remove the bobbin

- 1 Open the machine slide plate by removing them right and left
- 2 Pull the rotary hook latch upward and then remove the bobbin by pushing upward direction as shown in Fig 1.
- 3 Ensure the needle is highest position while removing the bobbin.
- 4 Pull the rotary hook upward and remove the bobbin case. (Fig 2)
- 5 Remove the bobbin.



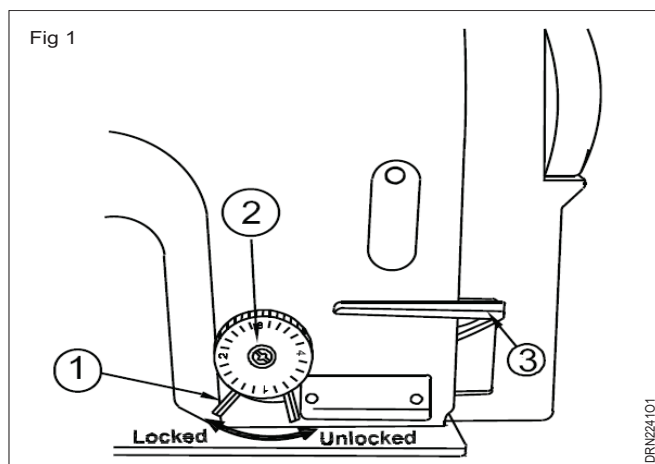
TASK 5 : Thread the upper thread

- 1 Thread take up lever the major function of take up lever provide the thread to the needle during the stitch.
- 2 Press the tension release plates before pressing the thread to free tension disc. It will help to pass the threading easily.
- 3 Pass the thread on the inside of the tab. It will help to reduce the tension in sewing thread. (Fig 1)

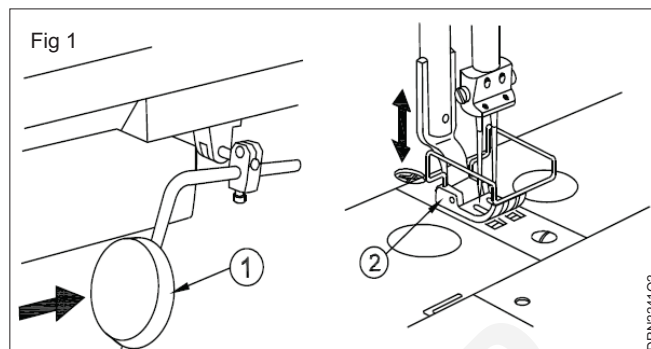


TASK 6 : Adjust the stitch length

- 1 Unlock the stitch length dial by turning the dial lock lever to the right until the click sound is heard.
- 2 Turn the stitch length dial clockwise or counter clockwise as per the desired stitch length is at the upper most position on the dial. (Fig 1) The larger number indicate in dial is longer stitch. Depending on the fabric the stitch length can be adjusted.



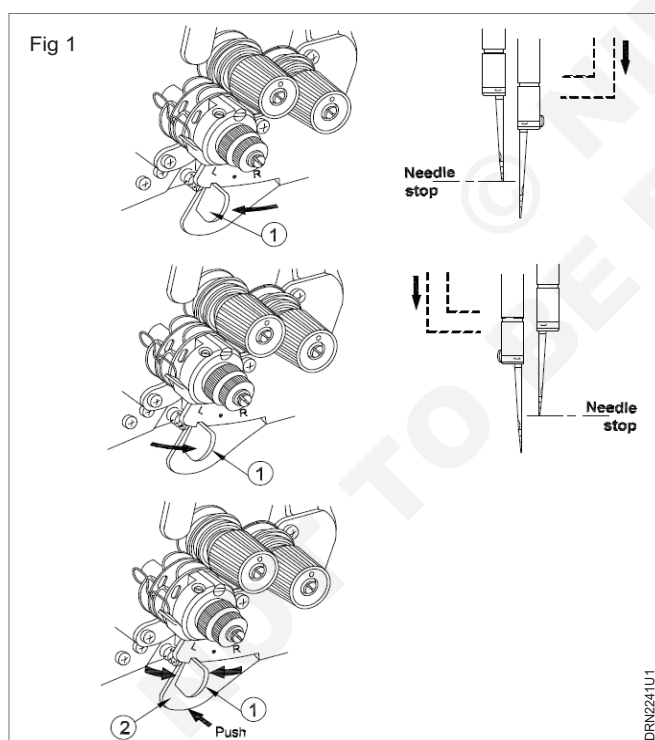
- 3 Turn the dial lock lever firmly to the left to lock the stitch length dial.
- 4 Use the knee lifter. (Fig 2)



- 5 The presser foot lifter is used to lift the presser and rotate the machine in a high speed process avoiding the hand lifter lever.

Ensure that at the end of the process the stitch length dial does not rotate.

TASK 7 : Stop the needle bars (right to left) (Fig 1)



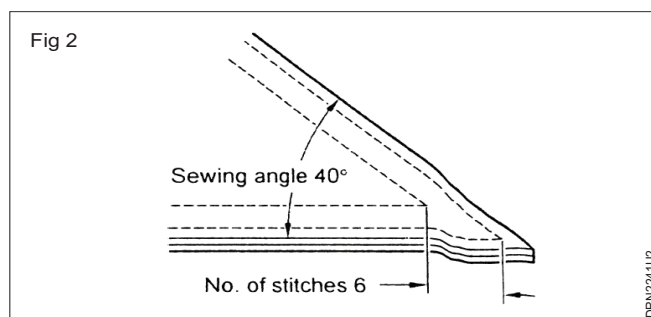
- 1 Operate the stop lever after the needle has penetrated the material is stopped moving.
- 2 While running the machine the speed of the machine should not be more than 1000 r.p.m.
- 3 To stop operation of the left needle bar move the stop lever (1) to the 'L' position.
- 4 To stop operation of the right needle bar move the stop lever (1) to the 'R' position.
- 5 To resume twin – needle sewing

- 6 Press the push lever (2)
- 7 The stop lever (1) will then return to its original position automatically.

Corner sewing method

While using this procedure in single needle machine, remove the needle which is not being used in such cases, do not use the procedures given below to stop the unused needle bar from moving, otherwise damage to the machine may result.

Number of stitches : Quick – reference guide (Fig 2)



For ¼ needle width

Determine the stitch length from the chart above to make beautiful corner stitching

The number of stitches of the outer needle varies according to the combination of sewing angle and stitch length.

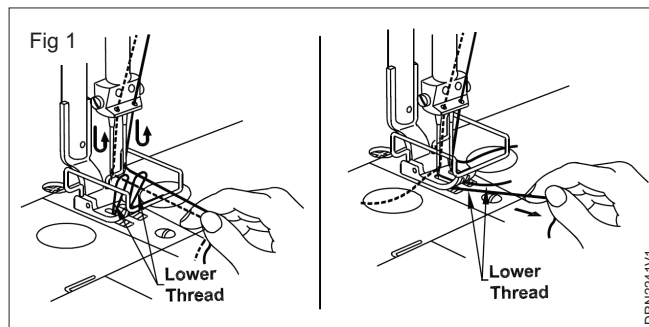
Example

For a sewing angle of 40° and a stitch length of 2.9 mm the number of stitches becomes 6.

After threading DNLS practicing for sewing.

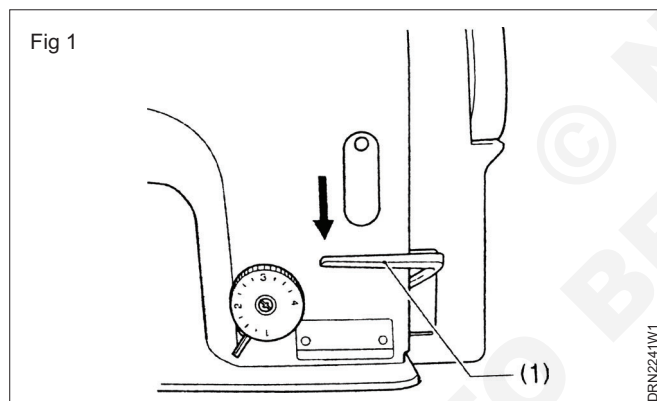
TASK 8 : Practice back tack and adjust the tension of upper and lower thread and back tacking

- 1 While holding the two upper threads with your finger turn the machine pulley by hand towards you until the lower threads come out on to the feed dog.
- 2 Pull the lower thread towards you and check that they put out smoothly.
- 3 Turn on the power switch.
- 4 Depress the treadle to start sewing. (Fig 1)



No of Stitches	Sewing angle											
	30°	40°	50°	60°	70°	80°	90°	100°	110°	120°	130°	140°
2					4.6	3.8	3.2	2.7	2.2	1.8	1.5	1.1
3			4.6	3.5	3.0	2.5	2.1	1.8	1.5	1.2		
4		4.4	3.4	2.8	2.3	1.9	1.6	1.3				
5	4.8	3.5	2.7	2.2	1.8	1.5	1.3					
6	4.0	2.9	2.3	1.9	1.5	1.3						
7	3.7	2.5	2.0	1.6								
8	3.0	2.2	1.7									

TASK 9 : Back tacking during sewing (Fig 1)



- 1 Press the reverse lever during sewing to feed direction will be reversed then it released. The feed direction return to its normal.

Check the thread tension

- 1 Check the stitch quality in case the loop formation occurs on the needle side (visible side)
- 2 Adjust and turn the adjusting screw with help screw drive. (Fig 2)
- 3 Incase of stitch loop formation occurs in reverse side of the stitch
- 4 Lower the presser foot.
- 5 Adjust by turning the tension unit.
- 6 Formation of stitches after adjusting the thread tension. (Fig 3)

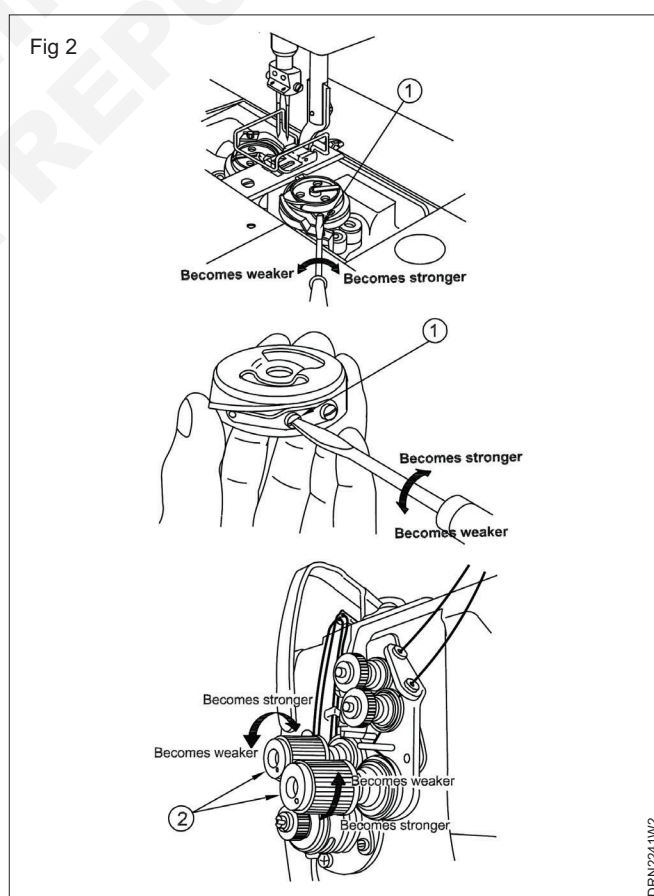


Fig 3

Correct seam



Upper thread tension too weak or lower thread tension too strong

Increase the upper thread tension.
Decrease the lower thread tension.



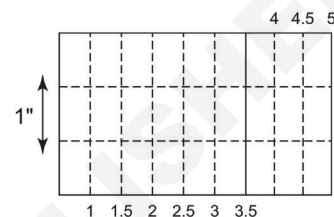
Upper thread tension too strong or lower thread tension too weak

Decrease the upper thread tension.
Increase the lower thread tension.

TASK 10 : Practice stitches per length on different material

- 1 Start the machine threading and complete the threading process.
- 2 Make samples by changing the stitch regular start from 1 as per the stitch length dial.
- 3 Turn the stitch length dial keep at 1.
- 4 Start stitching the first line of the seam with the back facing.
- 5 Again change the stitch length regulator 1.5 follow the above stitch.

Fig 1



- 6 Repeat the exercise by changing stitch regular 2, 2.5, 3, 3.5, 4, 4.5, 5. (Fig 1)

TASK 11 : Stitch and practice the corner sewing

- 1 While stitching the corner change the needle location and make the one needle at dummy position, each time reaching the corner.
- 2 Follow the same procedure on the right and left corner.
- 3 Practice the corner point stitching finally prepare the pocket stitching.

Practice on operation of button hole machine

Objective: At the end of this exercise you shall be able to

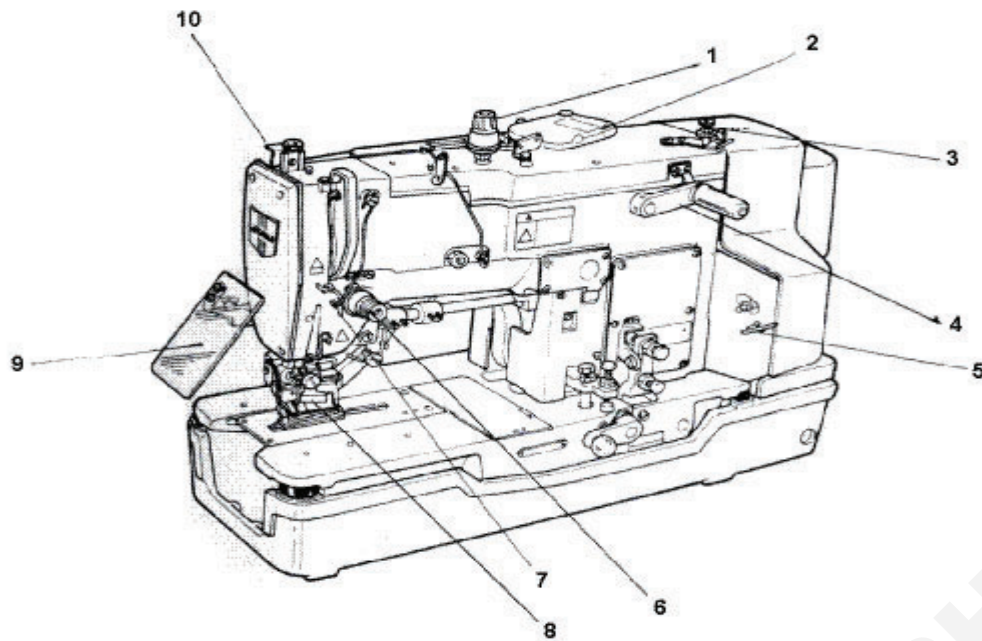
- identify the button hole stitching machine parts
- thread the button hole machine
- install and remove the bobbin case
- reduce the speed of the machine
- change the number of stitch length.

TASK 1 : Identify the button hole stitching machine parts (Fig 1)

Machine parts

- 1 Thread tension disc.
- 2 Speed gear for changing the number stitches in button hole.
- 3 Bobbin winder.
- 4 Emergency stopper.
- 5 Bobbin winder.
- 6 Thread tension (needle tension) disc.
- 7 Spring guard.
- 8 Knife for making the hole after stitching the button hole.
- 9 Window glass.
- 10 Knife stop lever.

Fig 1

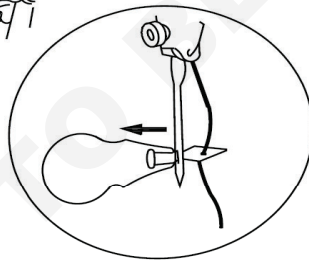
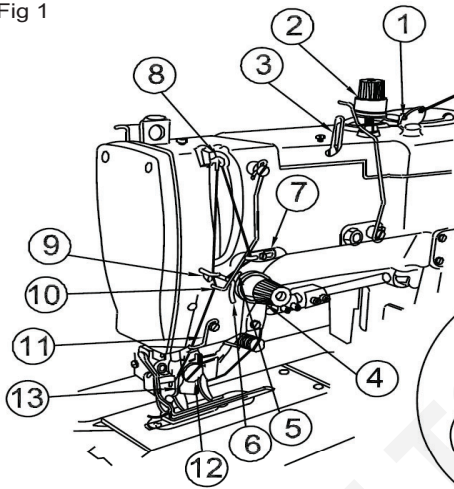


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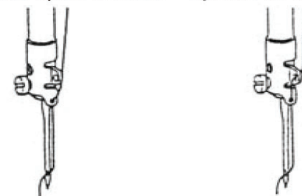
TASK 2 : Thread the button hole sewing machine

- 1 Pass the needle thread from the spool stand to the thread guide. (Fig 1)
- 2 Pass the thread from left to right to the thread tension disc.

Fig 1



Cotton thread, spun thread Synthetic filament thread



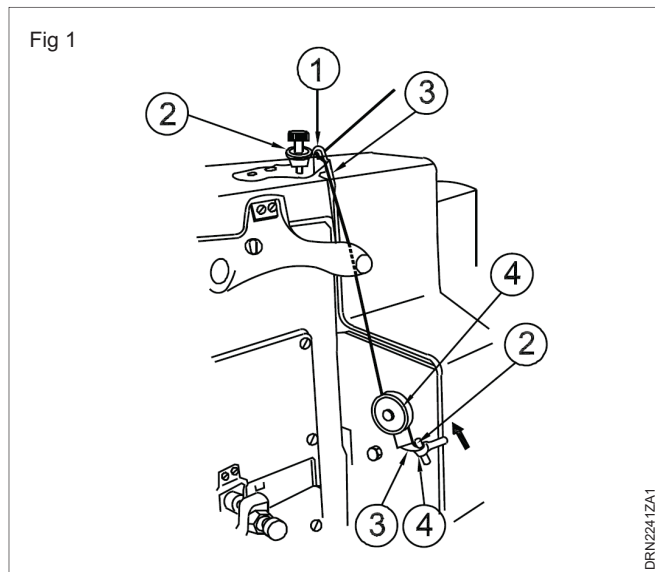
- 3 Then pass the thread to another thread guide from front to back.
- 4 Pass the thread to the thread tension disc from down to top direction.
- 5 Pass the thread from tension disc to spring guide.
- 6 Pass the thread to the thread guide
- 7 From the thread guide to 'T' guard pass the thread.
- 8 Bring the thread from 'T' guard to take up lever. Back to front pass the thread.
- 9 Then take up lever to pull the thread towards to down thread guide.
- 10 Finally pass the thread to adjusting thread guide pass the thread.
- 11 Pass the thread to 11 and 12 thread guide (in case of sewing thread cotton pass the thread to 12 guide directly).
- 12 Finally pass the thread into needle from back to front threaded.

Repeat the exercise for four or five times.

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TASK 3 : Install and remove the bobbin case in the button hole machine

- 1 Fit a bobbin onto the bobbin winder shaft.
- 2 Take the thread from the spool and pass it through the guide. (Fig 1)

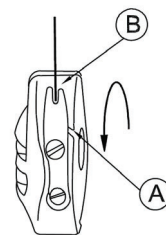


- 3 Push bobbin winder trip latch in the arrow direction and then bobbin will be wound.
- 4 Loosening the adjusting nut so that the bobbin is wound about four – fifths full.

Attach the bobbin into the bobbin case

- 1 Hold and place a bobbin into the bobbin case so that the bobbin is wound counter clockwise. (Fig 2)
- 2 Passing the thread through the thread outlet A of the bobbin case, pull the thread and thread can be drawn out from the thread outlet B, passing under the bobbin winder tension spring.

Fig 2

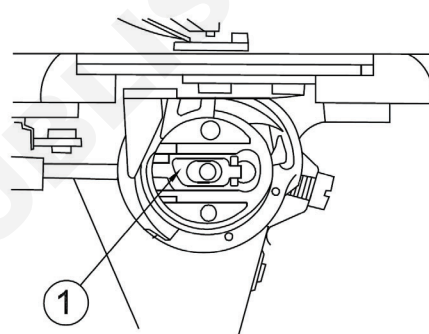


- 3 Set the bobbin so that in the arrow direction when the bobbin thread is pulled.

Installation/Removal of bobbin case

- 1 Lift up and hold bobbin case latch lever between two fingers to remove it from the hook. A bobbin does not fall off the bobbin case while the latch lever is lifted up.
- 2 For installation of the bobbin case push the bobbin case into the hook, so that it is supported by the hook shaft and the snap in the latch cover. (Fig 3)

Fig 3



TASK 4 : Reduce the speed of button hole sewing machine, emergency stop motion and manual feed handle

- 1 Reduce the speed of button hole sewing machine

To reduce the speed of sewing machine turn hand stop crank downwards to position A and the machine will be immediately slow down.

Emergency stop motion

- 1 Turn the hand stop crank downward to position A further upwards to position B and the machine will stop immediately. (Fig 1)

To operate the manual feed handle

- 1 After giving emergency stop to resume sewing from the point at which the thread was broken, rotate the manual feed handle to operate the cloth feeding mechanism. (Fig 2)

To stop the knife descend knife latch

- 1 Thread breakage occurs after sewing due to some other reasons, keep on pressing down knife stop lever lightly

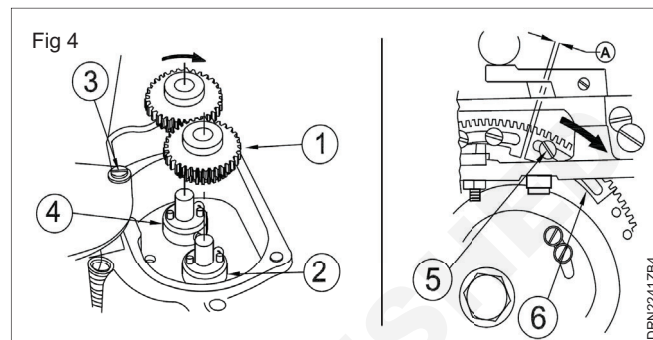
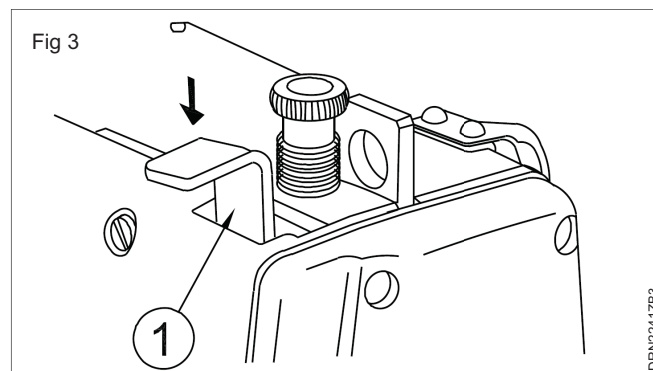
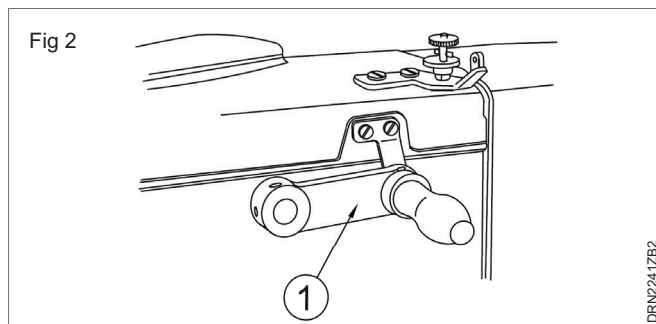
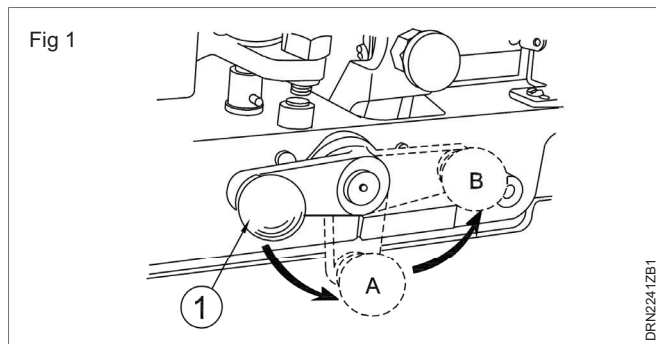
until the machine stops then the knife will not cut the fabric. (Fig 3)

Attach speed gear to the shafts

- 1 Push gear into the shaft so that it is securely fixed by the pin on gear bushing.
- 2 Located to an open
- 3 For installing gear on the pin rear gear bushing.
- 4 Push gear into the shaft while turning it the arrow direction. (Fig 4)

Adjust the length of the button hole

- 1 Pull out the cover
- 2 Raise the cover
- 3 Loosen the nut by using spanner
- 4 Set the point to a desired length on scale. Then tighten the nut. Then through the trial sewing adjust the length of button hole as per requirement. (Fig 4)



TASK 5 : Change the number of stitches in the button hole machine

- 1 The number of stitches in button hole decided by the combination of speed gear. Details are given in the following table. Select the speed gear and decides the number of stitches in the button hole.
- 2 In the table alphabetical marks like A, B, C etc., numerals like 132, 152 etc., are both engraved on each speed gear for identification. Use combination of gears which have the same alphabetical marks.
- 3 The numerical engraved on the gear installed in the rear position will represent the number of stitches provided by the combination of speed gear as shown in the table.

Symbol			Symbol		
i	54	345	A	93	200
①	62	300	B	100	190
K	66	285	C	105	180
②	70	268	D	110	170
M	72	252	③	115	180
N	79	238	F	123	152
O	83	225	④	130	145
	88	212	H		

Practice on operation of button sewing machine

Objective: At the end of this exercise you shall be able to

- identify the major parts of button stitching machine
- threadle the button stitching machine
- adjust the stitch length.

TASK 1 : Identify the major parts of button stitching machine

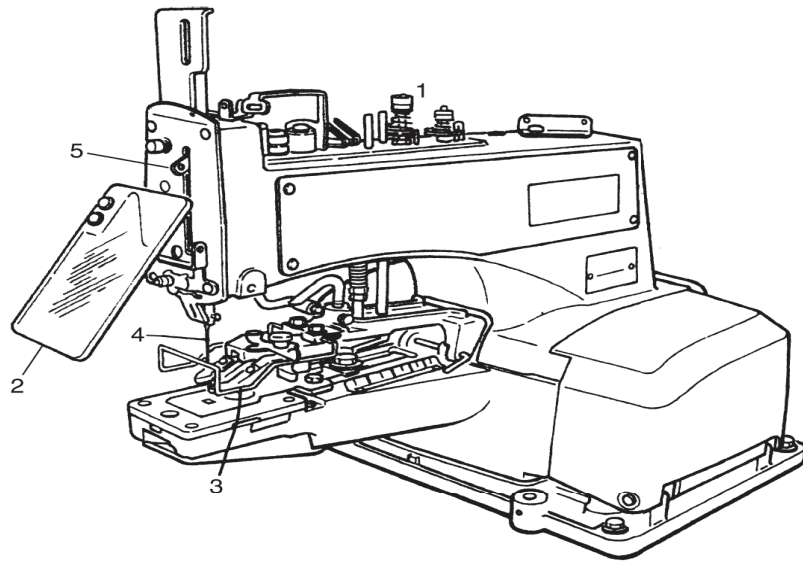
Name of the machine parts (Fig 1)

- | | |
|------------------------------|------------------------|
| 1 Needle thread tension disc | 3 Presser foot |
| 2 Window glass | 4 Needle |
| | 5 Thread take up lever |

TASK 2 : Threadle the button stitching machine (Fig 1)

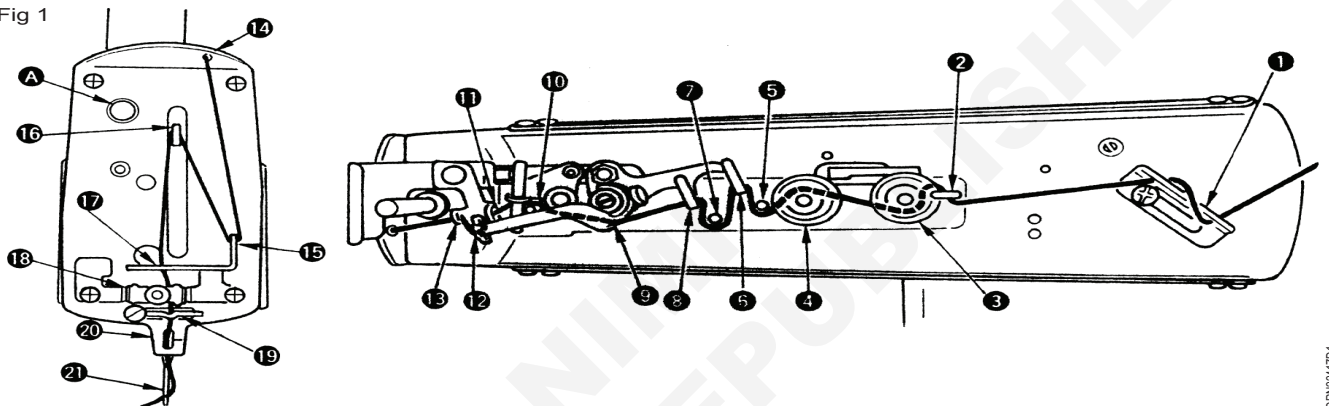
- 1 Start threading from the spool to thread guide 1 and 2.
- 2 Rotate the thread into tension disc in clockwise direction 3 and 4.
- 3 Put the thread into thread guide 5, 6, 7, 8, 9, 10 and 11, 12, 13.
- 4 Thread the 14th thread guide bring to spring 15, 16, 17 and 18.
- 5 Before threading into needle pass the thread 19 and 20 guide, 21 thread the needle thread from front to back.

Fig 1



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Fig 1



DRN2241ZD1

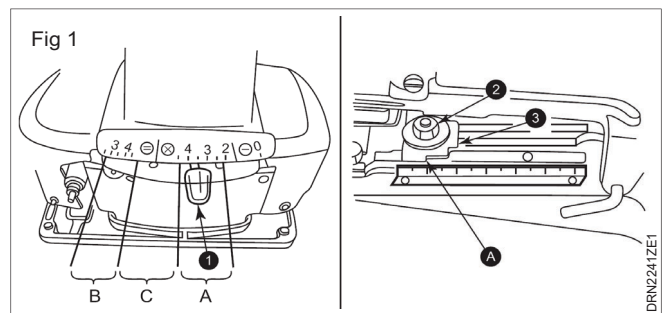
TASK 3 : Adjust the stitch length (Fig 1)

Length wise feed

- 1 Length wise feed push down the adjusting lever as shown in Fig 3 Pt:1
- 2 Set the feed to '0' for 2 holes buttons (0) 4 holes buttons

Cross wise feed

Loosen nut as shown in Fig 1 Pt: 2 and set section (a) of pointer(3) to a corresponding amount. Then tighten nut (2) for cross wise feed.



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Practice on operations of multi purpose (Zig Zag) machine

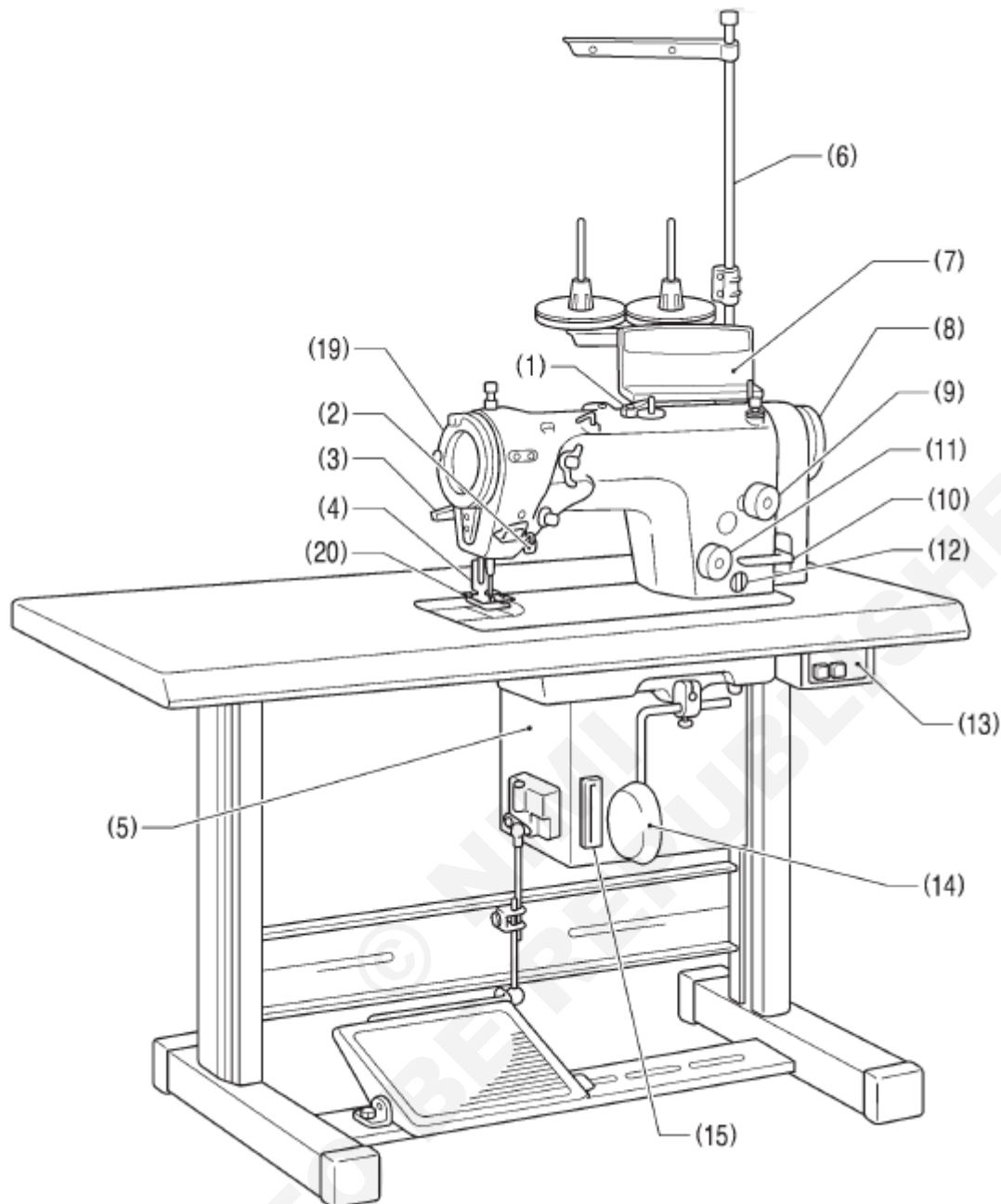
Objectives: At the end of this exercise you shall be able to

- identify the parts of a zig zag machine
- practice winding the lower thread on zig zag machine
- practice installing the bobbin case on zig zag machine
- practice upper threading on zig zag machine
- practice adjusting the stitch length on zig zag machine
- practice setting the sewing pattern on zig zag machine
- practice setting the zigzag width on zig zag machine
- practice sewing on zig zag machine.

TASK 1 : Identify the parts of zig zag machine

- 1 Identify the parts of a Zig Zag Machine with the help of the following figure. (Fig 1)

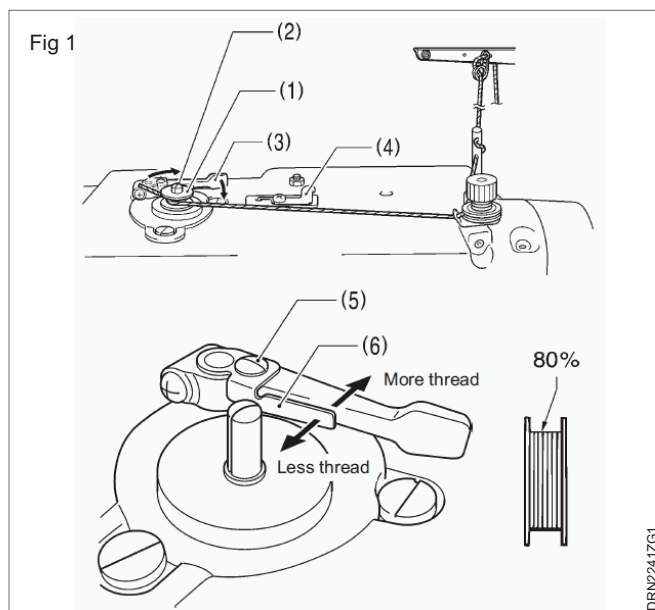
Fig 1



- 1 Bobbin winder
- 2 Actuator
- 3 Lifting lever
- 4 Presser foot
- 5 Control box
- 6 Cotton stand
- 7 Operation panel
- 8 Machine pulley
- 9 Stitch length dial
- 10 Reverse lever

- 11 Condense dial
- 12 Oil gauge window
- 13 Power switch
- 14 Knee lifter assembly
- 15 CF slot
- 16 Upper thread feeding device
- 17 Knife unit
- 18 Thread wiper
- Safety devices**
- 1 Thread take up guard cover
- 2 Finger guard

TASK 2 : Practice winding the lower thread on Zig Zag Machine (Fig 1).



- 1 Turn on the power switch.
- 2 Place the bobbin (1) onto the bobbin winder shaft (2).

- 3 Wind the thread several times around the bobbin (1) in the direction indicated by the arrow.
- 4 Push the bobbin presser arm (3) toward the bobbin (1).
- 5 Raise the presser foot with the lifting lever.
- 6 Depress the treadle. Lower thread winding will then start.
- 7 Once winding of the lower thread is completed, the bobbin presser arm (3) will return automatically.
- 8 After the thread has been wound on, remove the bobbin and cut the thread with the knife (4).
- 9 Loosen the screw (5) and move the bobbin presser (6) to adjust the amount of thread wound onto the bobbin.

The amount of thread wound onto the bobbin should be a maximum of 80% of the bobbin capacity.

Do not touch any of the moving parts or press any objects against the machine while winding the lower thread, as this may result in personal injury or damage to the machine.

TASK 3: Practice installing the bobbin case on zig zag machine (Fig 1).

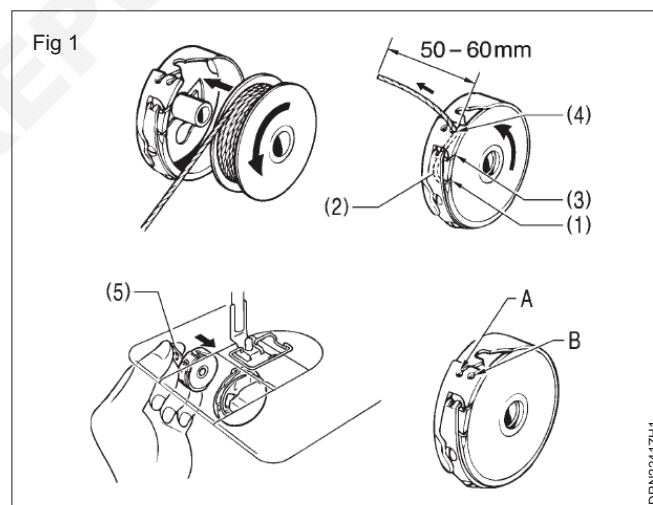
- 1 Turn the sewing machine pulley to align the reference line on the pulley with the indent in the motor cover.
- 2 Hold the bobbin so that the thread spools out counter clockwise, and place the bobbin into the bobbin case.
- 3 Pass the thread through slot (1) and hook it under the tension spring (2).
- 4 Pass the thread back through the slot (3) and then pull it out from the thread guide.

A and B on the thread guide (4) (Guide to identification)

A Normally A should be used.

B The amount of lower thread feeding-out is greater than for A, so this is ideal for extremely stretchy materials and medium-weight materials.

- 5 Check that the latch (5) of the bobbin case, insert the bobbin case into the rotary hook.
- 6 While holding the latch (5) of the bobbin case, insert the bobbin case into the rotary hook.



Turn off the power switch before installing the bobbin case.

The machine may operate if the treadle is depressed by mistake, which could result in injury.

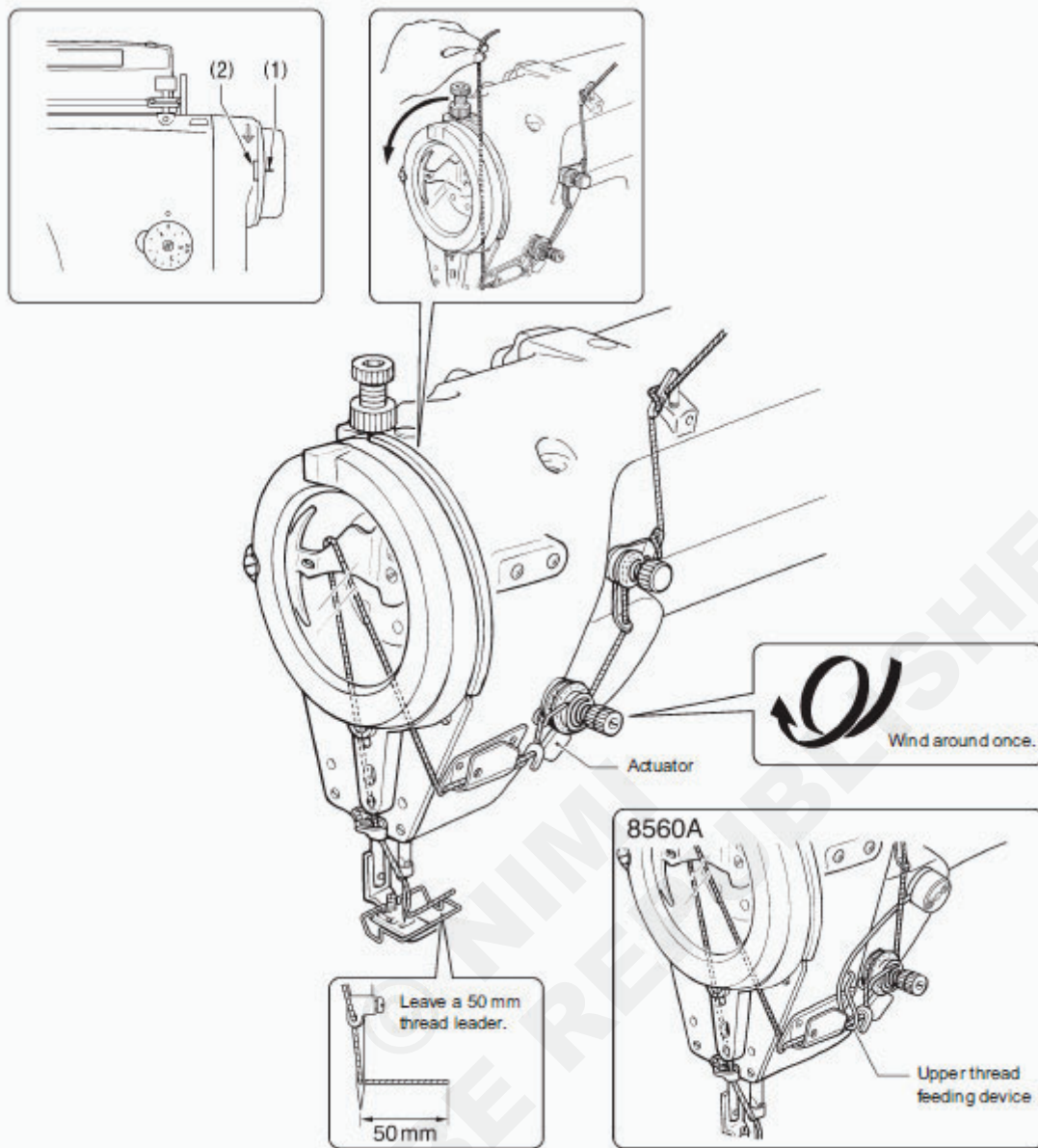
TASK 4 : Practice upper threading on zig zag machine (Fig 1)

- 1 Turn the sewing machine pulley to align the reference line (1) on the pulley with the indent (2) in the motor cover (needle up stop position)
- 2 This will make threading easier and it will prevent the thread from coming out at the sewing start.

Turn off the power switch before threading the upper thread.

The machine may operate if the treadle is depressed by mistake, which could result in injury.

Fig 1



If the actuator is pressed by mistake when using the correction sewing function, the needle will move in a zig zag motion while the machine is operating and injury may result.

TASK 5 : Practice adjusting the stitch length on zig zag machine (Fig 1)

Turn the stitch length dial (1) until the desired stitch length number is aligned with the index mark (2) above the dial.

- The larger the number, the longer the stitch length will be.
- The numbers on the dial are for use as a guide. The length of the finished stitches may vary depending on the type and thickness of material being sewn. Adjust while looking at the finished stitches.

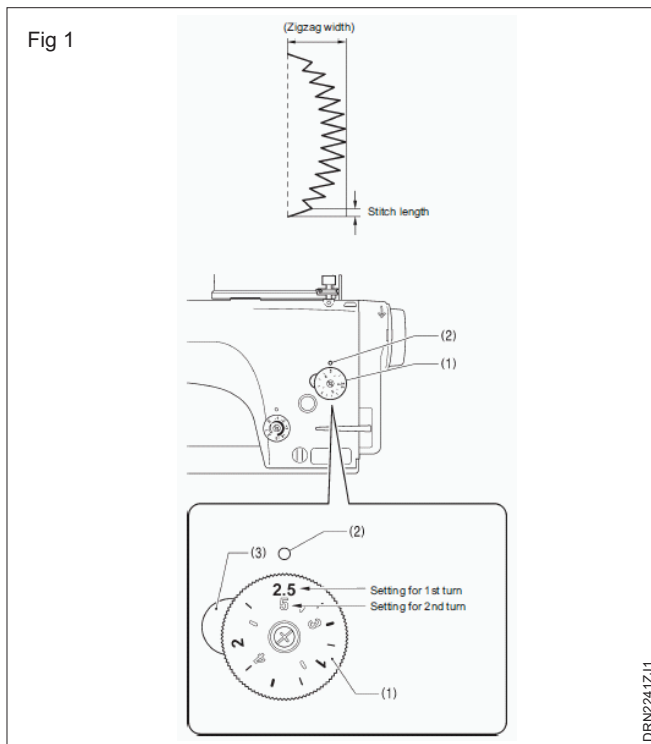
If the stitch length dial (1) is turned to a setting greater than 2.5

- In this case, replace gauge parts such as the feed dog with parts for using with a feed amount of more than 2.0mm.

- In addition, change the maximum feed amount setting while referring to Page 57, and then adjust the stitch length dial (1) as described below.

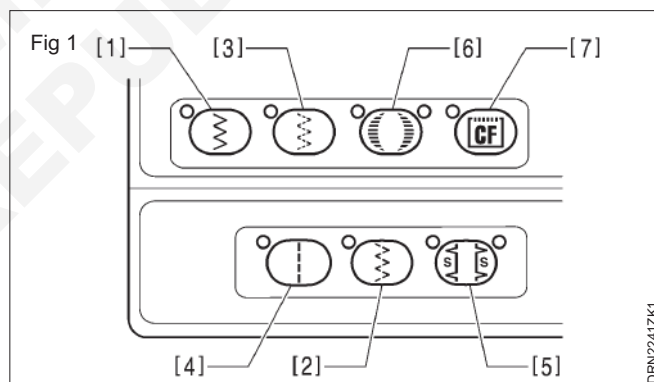
- Turn the stitch length dial (1) all the way to "2.5".
- After this, push the left lever (3) while turning the stitch length dial (1) so that it can be turned a second time. When the stitch length dial (1) is turned a second time, the settings will be those on the inside of the scale (3-5).

- When turning the dial from a larger number to a smaller number, it can be turned to the second time setting without pushing the left lever (3).



TASK 6 : Practice setting the sewing pattern on zig zag machine (Fig 1)

- 1 Press the sewing pattern select keys ([1] to [7] in the illustration left) to select the sewing pattern. The indicator for the key that was pressed will illuminate and the pattern number that has been set for that key will appear in the main display.
- 2 When a sewing pattern has been set, be sure to set the zig zag width.
- 3 Different zig zag widths and zig zag lengths can be set for each sewing pattern.



TASK 7 : Practice setting the zig zag width on zig zag machine (Fig 1 & 2)

Set the zig zag width after selecting the pattern number.


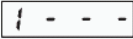



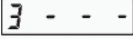

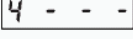


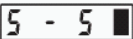

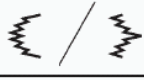
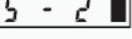
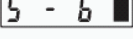

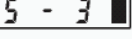
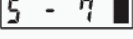

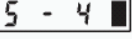




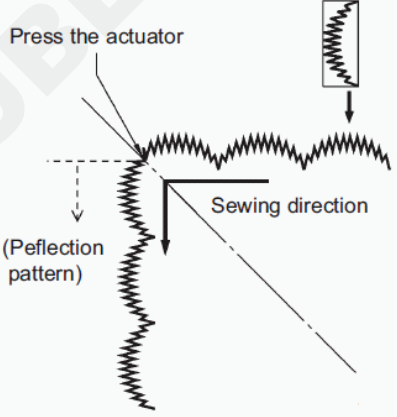


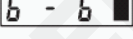

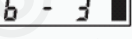



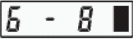

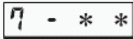

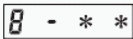
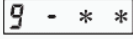
The zig zag width is defined as the distance between the left most needle drop point and the right most needle drop point.

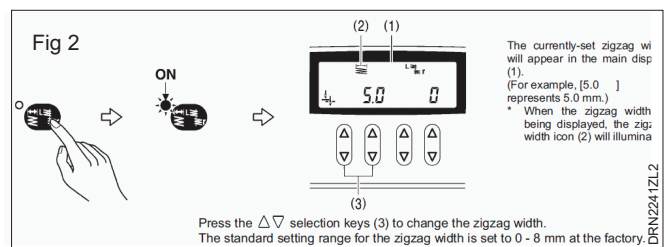
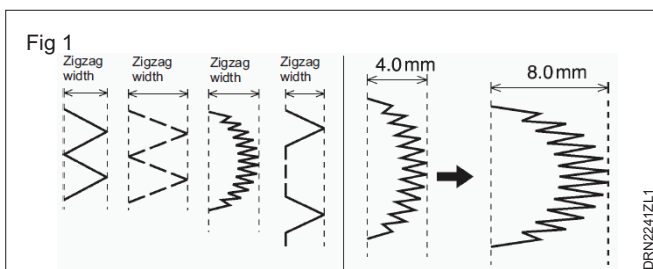
If the zig zag width is increased or reduced, the width of the sewing pattern is also increased or reduced by the same proportion.

- 1 The zigzag width will be automatically set to (0.0) only when the straight stitch has been selected as the sewing pattern.

Note

- The zigzag width cannot be changed if the indicator is not illuminated, even when the zigzag width is being displayed in the main display. When changing the zigzag width, press the zigzag width/zigzag base line position key so that the indicator is illuminated, and then change the setting.
- If the needle bar is at the needle up stop position, the needle bar will move to the sewing start position when the zigzag width is changed.
- If the needle bar is not at the needle up stop position, the needle bar will move to the sewing start position after it next moves to the needle up stop position.

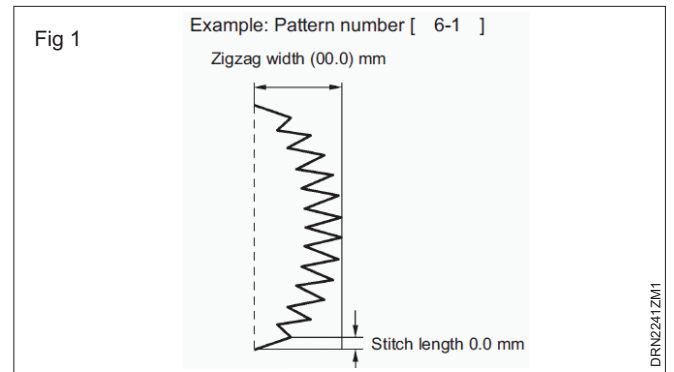
	Sewing pattern	Pattern no. (Main display)	Notes
Straight stitch			
Plain zigzag			
2-step zigzag			
3-step zigzag			
Scallop (left)	Crescent scallop (24sts.)	  / 	If R is set in the column marked with  , a reflection pattern can be sewn by stopping the sewing machine and then pressing the actuator.
	Even scallop (12sts.)	  / 	
	Standard scallop (24sts.)	  / 	
	Even scallop (24sts.)	  / 	
Scallop (right)	Crescent scallop (24sts.)	  / 	<p><Reflection pattern></p>  <p>Press the actuator</p> <p>Sewing pattern</p> <p>Sewing direction</p> <p>(Reflection pattern)</p>
	Even scallop (12sts.)	  / 	
	Standard scallop (24sts.)	  / 	
	Even scallop (24sts.)	  / 	
Blind stitch (left)			In the columns marked with *, the number of stitches sewn in a straight line can be set within the range of 1 to 99 stitches.
Blind stitch (right)			
Custom made pattern	-		Sewing patterns created using the PS-300B (optional device) can be sewn. (The pattern number is set in the columns marked with *.)



TASK 8 : Practice sewing on zig zag machine

- 1 Press the ON power switch.
- 2 Use the operation panel to make the necessary settings such as sewing pattern and zigzag width.
- 3 Set the stitch length using the stitch length dial.
- 4 Place the cotton fabric under the presser foot.
- 5 Depress the treadle to start sewing. (Fig 1)

Get the work checked by your instructor.



Pattern making using draping/adaptation ladies wear

Objectives: At the end of this exercise you shall be able to

- prepare the muslin cloth for draping in basic bodice
- prepare the muslin for dart variation.

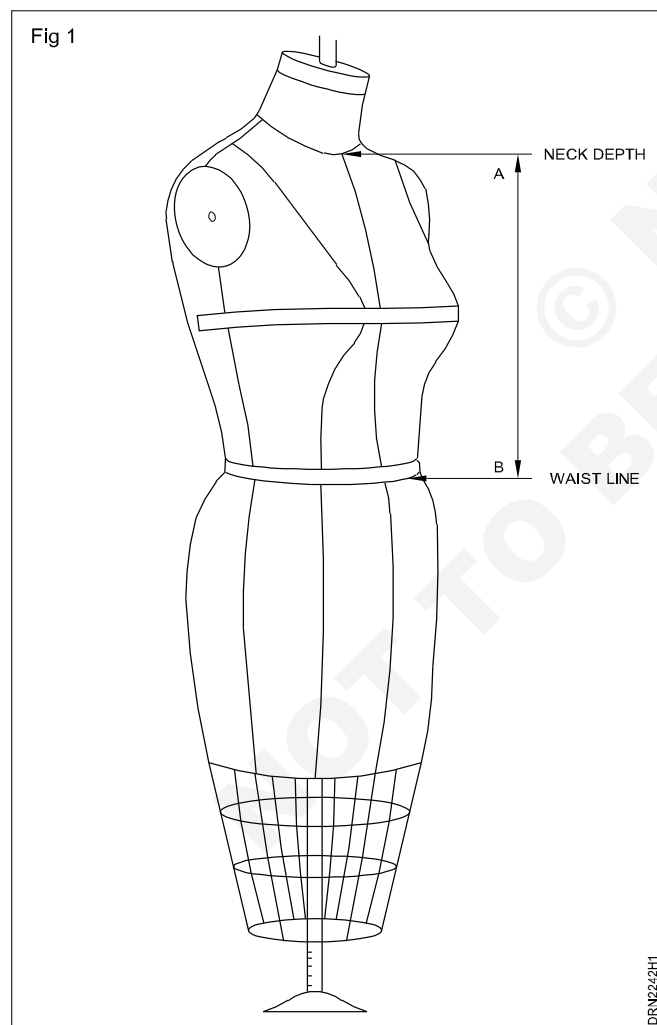
Requirements

Materials

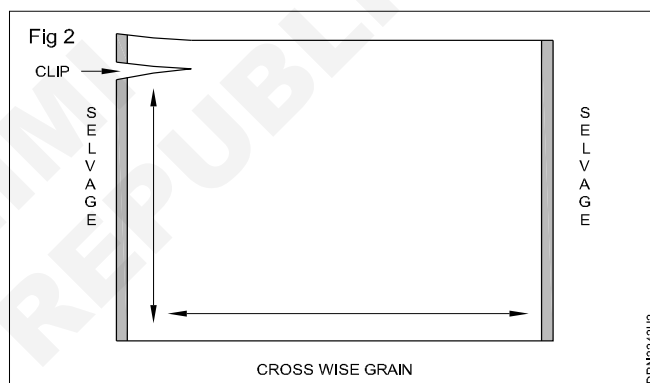
• Tailor chalk	- 1 No.	• Tracing paper	- 1 No.
• Measuring tape	- 1 No.	• Dress form	- 1 No.
• Scissors	- 1 No.	• Iron box	- 1 No.
• Pencil HB	- 1 No.	• Ironing table	- 1 No.
• Quilters ruler	- 1 No.	• Muslin cloth	- 1 No.
• Paper pins	- 1 No.	• Tracing wheel	1 No.

PROCEDURE

TASK 1 : Preparation of muslin cloth for draping (Fig 1)



- 1 Measure the dress form from the neckline to waist line (a \longleftrightarrow b)
- 2 On the fabric measure along the selvedge the required measurement + 10cm for the seam allowance. (Fig 2)



Tearing : The true cross wise grain (widthwise) which form the edge of the fabric used for draping.

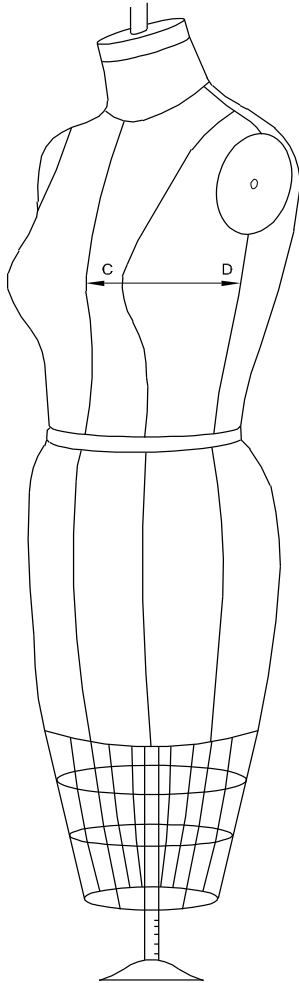
- 3 Clip (slit with scissors) selvedge & tear along the cross wise grain.
- 4 On the dress form measure the distance from side seam to the center front at the bust level. (c \longleftrightarrow d)
- 5 On the fabric measure along the crosswise grain the required measurement add 10cm for seam allowance.
- 6 Clip (slit with scissors) along the length wise grain.
- 7 Block & press the muslin.

Blocking : There shopping of the muslin cloth by pull the edges diagonally until the fabric is square right angle. (Fig 3)

Pressing : Once the blocking process is finished pressing of the muslin blocked fabric is a must to keep the yarn in place press in the direction of length wise & crosswise grain. Do not press bias wise. Use only steam & dry iron. (Fig 4)

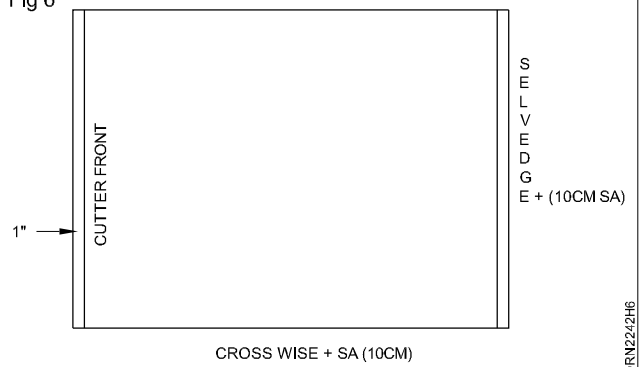
- 8 Draw the grain line for center front leaving 1" from the lengthwise form edge.
- 9 Measure the length & width of the bust point on the dress form. (l) (Fig 5)

Fig 3



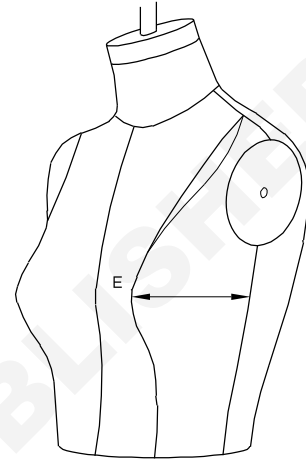
DRN2242H3

Fig 6



DRN2242H6

Fig 7

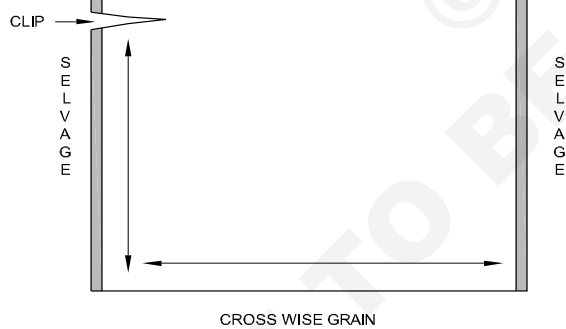


DRN2242H7

12 Mark the princess panel dividing the open and fid seam.

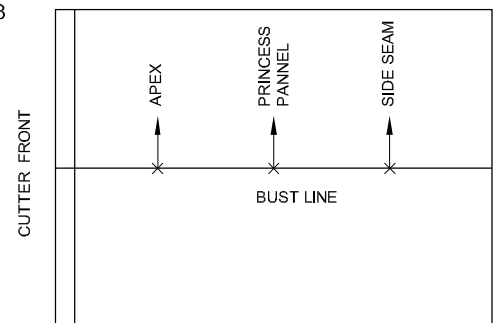
13 Draw lines on the marked points lengthwise. (Fig 8)

Fig 4



DRN2242H4

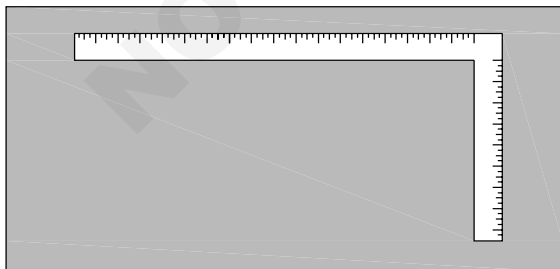
Fig 8



DRN2242H8

14 Block and press the fabric before draping.(Fig 9)

Fig 5

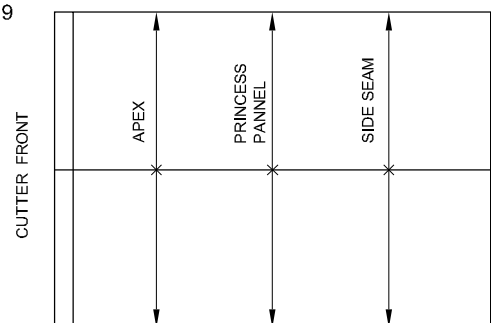


DRN2242H5

10 Mark the bust point & Draw the line crosswise on the fabric dividing it.(Fig 6)

11 Mark the apex line & seam line lengthwise on the bustline by adding 1/8" for case (0.3cm) (Fig 7)

Fig 9



DRN2242H9

TASK 2 : Draping Instruction of front

- 1 Take one piece of fabric 5 inches longer than the neck to waist on the form. 5 inches wider than the center front to side seam.
- 2 Pin the fabric on the form and draw a cross grain line near the middle of the fabric.
- 3 The form across the bust line and mark the bust point.
- 4 Pin the fabric at the bust point, the center front waist, neck and apex points(Fig 1)

Fig 1



- 5 Drape the waist dart. Clip the fabric at the princess line near the waist line. (Fig 2)

Fig 2



- 6 Pin at the side seam and center front waist points.
- 7 The fabric is falling from the side seam arm plate and hand straight down.
- 8 Smooth the fabric at the waist over from the center front waist.
- 9 Pin at the princess line. (Fig 3)

Fig 3



- 10 Smooth the fabric from the side seam waist to the princess line/waist point.
- 11 Extra fabric should form the front waist dart. Fold excess and pin it. (Fig 4)

Fig 4



12 Pin at the side seam arm plate and smooth the fabric up. (Fig 5)

Fig 5



13 Trace the side seam, waist seam and neck ling using by pencil.

14 Clip the fabric at the neck line and smooth.

15 Pin at the shoulder arm plate point and neck point another dart on the princess line.

16 Pin it and mark the arm plate screw. (Fig 6)

Fig 6



17 Mark each dart ends and leg. (Fig 7)

Fig 7



18 Draw a rough lines using by ruler on the dress form

19 Draw the dart ending at the bust point the cross grain line and the same at the bottom of the dart legs. (Fig 8)

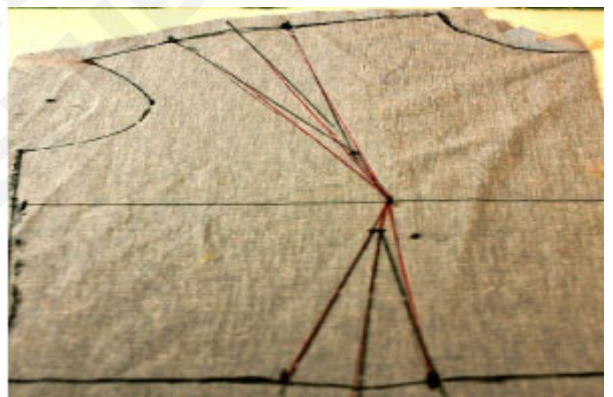
Fig 8



20 Iron the fabric pattern and tape it to the paper.

21 Trace the pattern lines on the fabric using tracing wheel. (Fig 9)

Fig 9



22 Remove the fabric and draw a line on the impressed paper using pencil and ruler.

23 Move the shoulder dart and cut the center of both darts and touching the bust point. Square the edge of the pattern. (Fig 10)

Fig 10



- 24 Make a mark 1" inch under the armhole and $\frac{1}{2}$ " inch out from the side seam 25. Redraw a armhole add $\frac{3}{8}$ " inch seam all around the pattern. (Fig 11)

Fig 11



- 25 To finish the dart.

- 26 Need to fold the dart closed and cut along the seam line at the waist. (Fig 12 to 14)

Fig 12

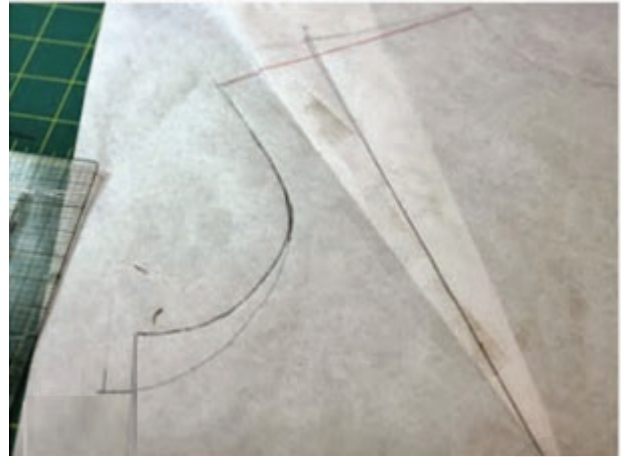


Fig 13

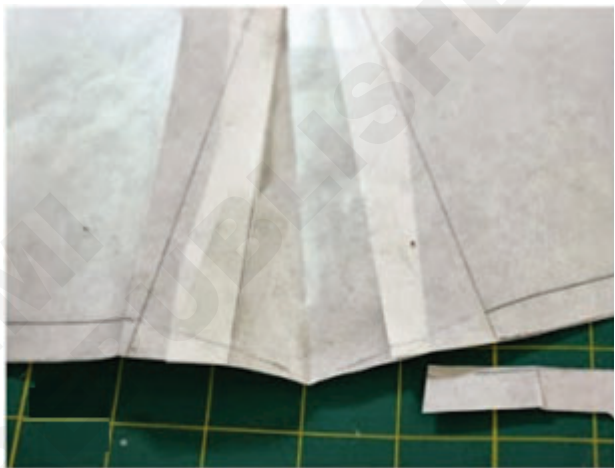
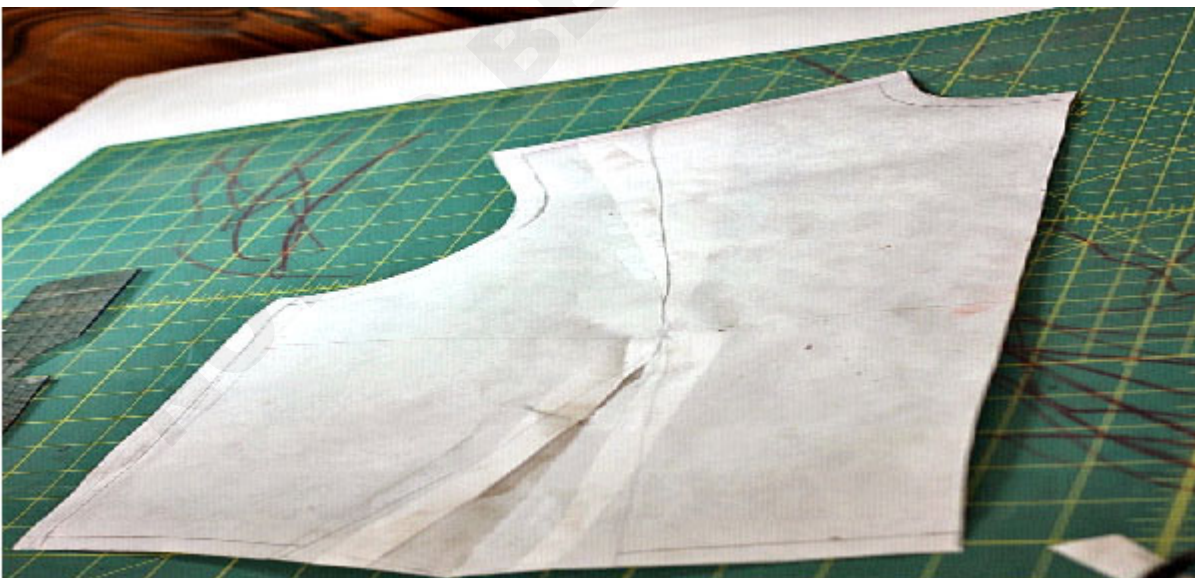


Fig 14

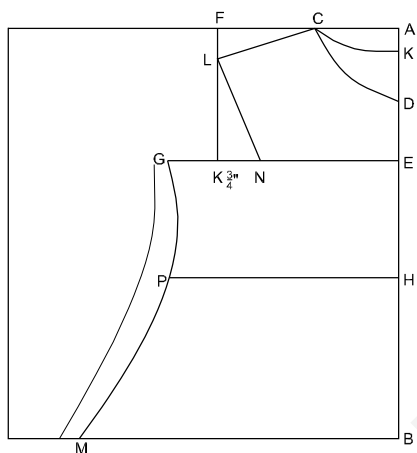


Pattern making using adaption for Ladies Wear

The basic measurements you should take for Adaptation

Desired length	How long do you need the top to be (add 3 -4 inches to this measurement)
Waist length	measure from where shoulder meets your neck to the waist
Shoulder	From where your shoulder meets the neck to the tip of the shoulder bone
Bust measurement	Around the bust
Waist measurement	Around the waist
Sleeve length	
Sleeve round	Where you want the sleeve to end
Neck depth	Both front and back.
Hipround	measure around hip loosely

Fig 1



- A - B = Length + 2"
- A-C = Neck Width (minimum 3" or as per table)
- C-D = Front neck depth (minimum 3" or as per table)
- A-K = 7.5" for adults minium (Or as per table)
- A-F = 1/2 of shoulder to shoulder + 1/4 inch
- F-L = 3/4 inch
- K-N = 3/4 inch
- E-G = 1/4" bust round + 1/2 inch
- P-H = 1/4" waist round +1/2 inch
- B-M = 1/4" hip round + 1/2 inch
- Add 1 inch seam allowances aong G-P-M
- A-B = Length + 2"
- A-C = Neck width (minimum 3" or as per below table)

DRN2242X1

Bust Measurement	Neck width (inches)	Neck depth (inches)
20	2	4
22	2	4
24	2 1/4	4
26	2 1/4	4 1/2
28	2 1/2	5
30	2 1/2	5 1/2
32	2 1/2	6
34	2 3/4	6 1/2
36	2 3/4	7
38	3	7
40	3	7
42	3	7

C-D = Front neck depth (Minimum 33 or as per table)

- Neck depth (this is how deep you want the neck to be – Mark the front neck depth and back neck depth); – Mark from C to the line A-B. Front neck depth can be taken as per the above table, Back depth depends on your preference
- A-F = 1/2 of shoulder to shoulder + 1/4 inch

- F-L = 3/4 inch ; this is for shoulder slope From point – F on shoulder tip mark down 3/4 inch to point L (please make this 1/2 inch for kids) Give the shoulder slope by joining the line C-L.
- K-N = 3/4 Inch
- Mark A-E which is the armhole depth or the bust line – as per table or 7.53 for adults. This is the bust line. E-G is marked on this line.

- Another measurement for armhole line is to calculate it by the bust round.
- Armhole depth = Bust round divide by 8 plus 3.5 inches.

Bust measurement inches	Armhole depth
26	6 1/4
28	6 3/4
30	6 3/4
32	7
34	7 1/4
36	7 1/4
38	7 1/4
40	7 1/2
42	7 1/2

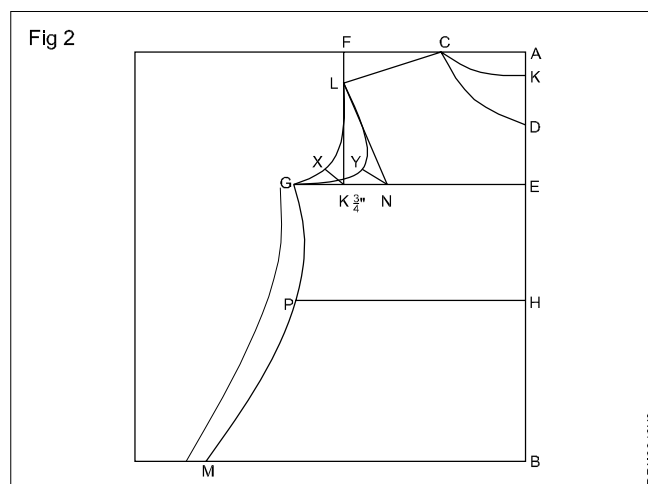
Another measurement for a more fitting armhole

Bustround	Armhole measurement fitting
28 inch	4 3/4"
30 inch	5
32 inch	5 1/4"
34 inch	5 1/2"
36 inch	5 3/4"
38 inch	6"
40 inch	6 1/4"
42 inch	6 1/2"
44-46 inch	7"
48-50 inch	7 1/2"

- Draw straight line down from F so that it intersects with line E-G .
- $E-G = \frac{1}{4} * \text{bust round} + \frac{1}{2} \text{ inch ease}$
(i.e if my bust is 36 inches, that divided by 4 is 9. Add $\frac{1}{2}$ inches ease which will be 9.5 inches ; seam allowance of 13 should be added later)
- $A-H = \text{Waist length}$
- $P-H = \frac{1}{4} * \text{waist round} + \frac{1}{2} \text{ inch}$
- $B-M = \frac{1}{4} * \text{hip round} + \frac{1}{2} \text{ inch}$
- Add 1 inch seam allowance along G-P-M

Back armhole

- Where the lines from F & G intersect (name it K) go outside (measure the distance between G& K and divide by two) .
- Mark the point as X .
- Make a curved shape of the armhole from L-X-G – this is the back sleeve line.



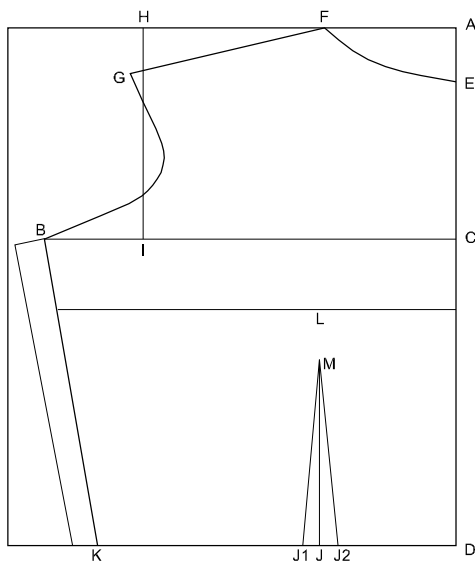
- To mark the front sleeve line Mark from K to the inside $\frac{3}{4}$ inch for adults and $\frac{1}{2}$ inch for kids. Mark this point as N .
- Draw up a straight line to L . From N Go outside $\frac{3}{4}$ inches diagonally to Y as shown in the diagram. L-Y-G is the front armhole line
- Draw a soft curved line touching Y from L to G – This is the front sleeve line.
- Ease – I have added 2 inch ease to the body measurements .
- You can alter this to your preference as per the standard chart of ease given below

Fit of the garment	Extra to be added to bust , waist and hip measurements
Tight fitting	Add extra -5 to -10 %
Close fitting	Add extra 0- 5%
Comfortable fitting ease	Add extra 7-10%
Loose fitting	Add extra 12-15%

Here is another bodice block with dart added.

- When making this pattern to sew tops is to draw directly on to the cloth with chalk.
- Both the front piece and the back piece will be kept folded .
- Draw the pattern on the top piece (which finally will turn out to be the front piece), cut out the back sleeve line and neck, remove the back piece (which is the back piece now) ,
- Continue cutting the front sleeve line and neckline on the remaining cloth with the marking lines already there.
- This way, no need to mark the front and back bodices separately.
- Cut the two pattern pieces and makes sure that the lines drawn are all cut away.
- Do the same for the back neck and front neck.
- Join the shoulder seams.
- Join the sleeves.

Fig 3



$B-C = 1/4$ of bust round

$A-F = 1/12$ of bust round

$A-C = 1/4$ of bust round - 1.5 inch

$A-H = 1/2$ of shoulder to shoulder + $1/4$ "

Shoulder slope = $1/2$ "

$D-K = 1/4$ of waist round + 2.5"

$D-J = 1/12$ of bust round

L - Nipple point at bust level

Dart width at J = 1.5 inch

$K.D = 1/4$ of waist round + 2" (ease + dart) seam allowance extra at B-K = 1"

Fig 4

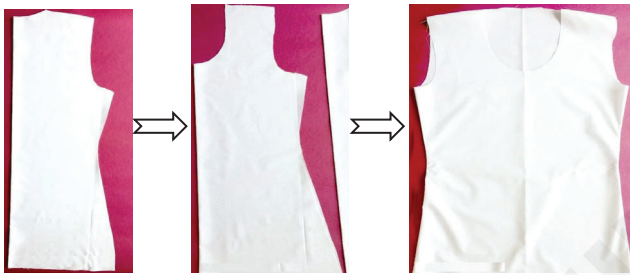


Fig 5



- Add this to a skirt to make a dress or adopt different design features to make it your own.

A-C = Length of the top (Fig 6)

$A-B = 3 \frac{1}{2}$ "

$A-G = 8 \frac{1}{43}$

$H-J = A-G$

$H-I = 3/43$

$D-E = 33$ (OR 43)

$A-H = 1/2$ of shoulder point to shoulder point + $1/4$ "

$G-F = 1/4$ of Bust round + $3/4$ "

$E-L = 1/4$ of Hip round + 2 "

$K-J = 1/2$ of F-J

If want a more fitting pattern with a close body fit you can add darts, this will ensure that the bodice fits the contours of your body

Fig 6

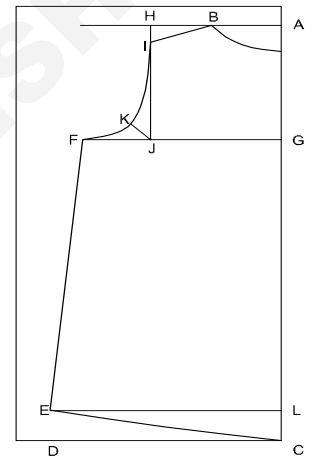


Fig 7

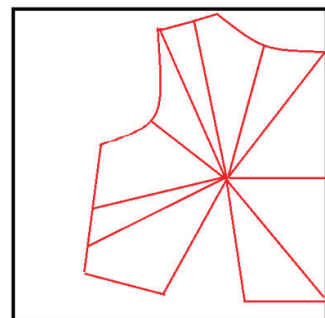
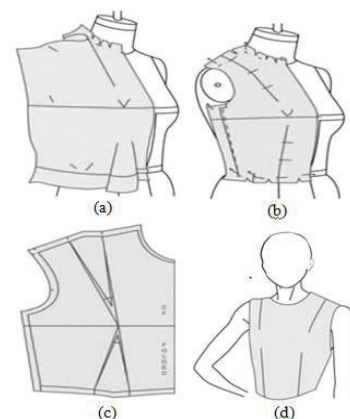


Fig 8



Sew a churidar

Objectives: At the end of this exercise you shall be able to

- stitch and finish the inside leg with taped seam
- stitch a churidar.



Requirements

Tools/Equipments

- Single needle lock stitch machine

- 1No.

Materials

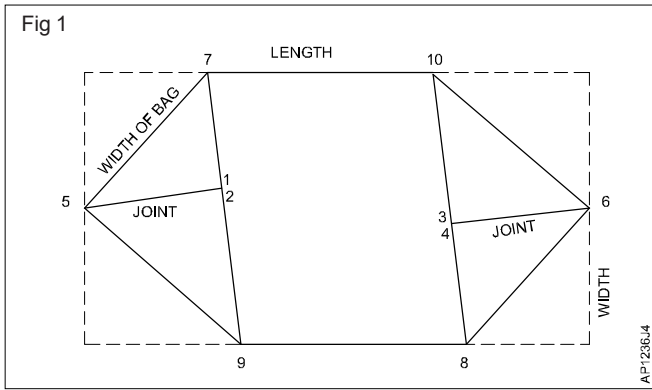
- Tape 1.5cm width 2meters in size

- Hooks
- Thread
- Machine needle 16
- Hand needle

Fig 1



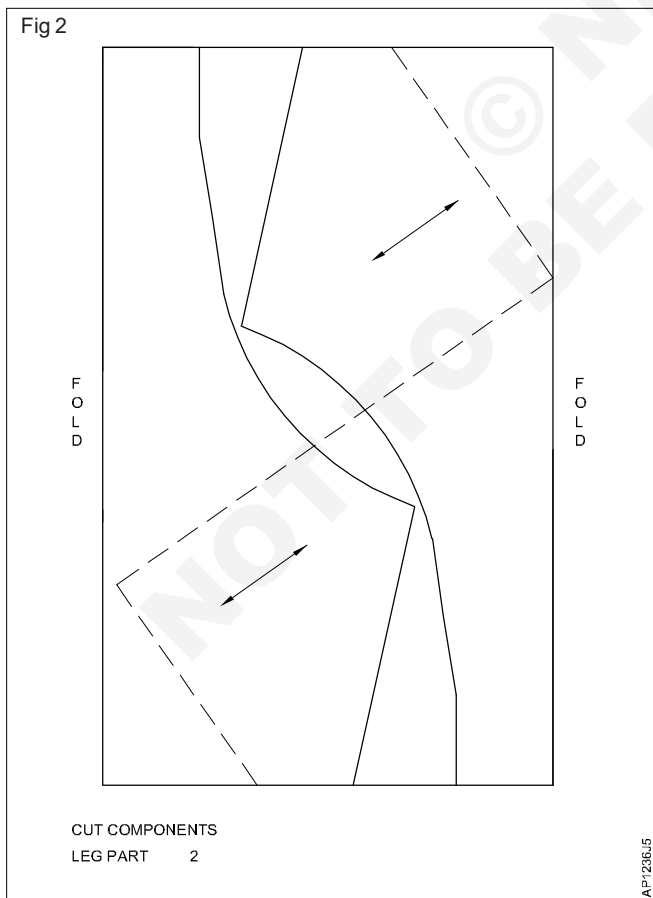
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Fold the brown paper lengthwise, cut along the outer lines of draft, so you get two copies of the pattern for layout. Mark notches for fold-down casing, bottom hem and seam allowance. Roll the cylinder and lay the pattern on bias bag in such a way that the maximum joints are placed above knee, ie. on upper side.

To find the right placement of the cylinder you have to try: roll the cylinder and place the pattern. If the placement still is not proper try once more.

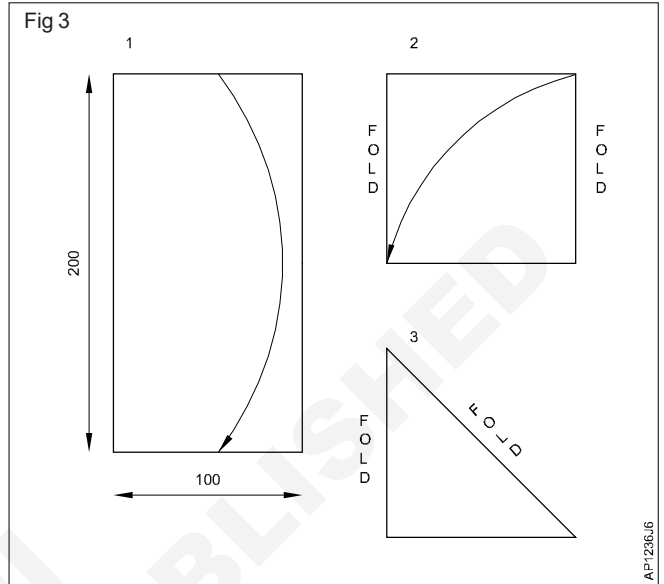
After finding the right position of cylinder make the cylinder flat, take care that no wrinkles are there. The paper pattern has to be placed in opposite direction the straight part of the pattern has to be placed at the long folded side of the bias bag. (Fig 2)



The next two graphics show another type of layout which can be used only on bigger width: the material required is 2.00 x 1.00 m.

The advantage of this layout is: there are no joints in leg pieces, so it is more comfortable to wear. Leg seams also keep in position, even after several washings.

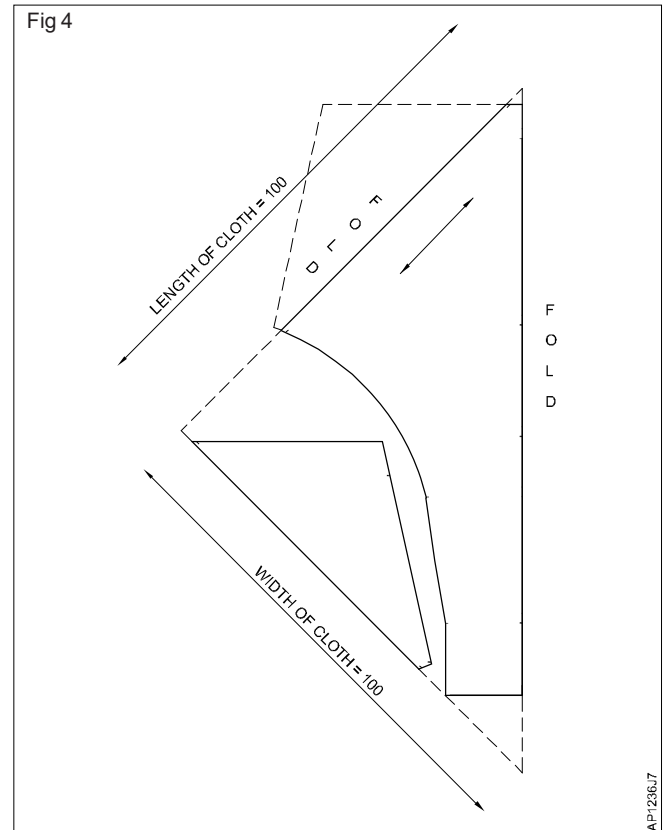
Fold the fabric twice. (Fig 3)



Layout as shown. (Fig 4)

While stitching the triangular leg pieces take care to join them selvages together and widths together.

To reduce the bulk of material on waistline, the churidhar can also be stitched with belt, similar as in Salwar.



Draft and cut a churidar

Objectives: At the end of this exercise you shall be able to

- calculate the material required for a churidar
- draft and cut the churidar paper pattern and master pattern.
- prepare the bias bag for layout and cut the required components.

Measurements (Medium size)	
<ul style="list-style-type: none"> • Full length (Waist to ankle) = 105 cm • Churi = 15 cm • Hip = 100 cm • Round knee = 41 cm • Round calf = 38 cm 	<ul style="list-style-type: none"> • Round bottom (ankle) = 30 cm
Materials and Trimmings	
<ul style="list-style-type: none"> • 2.00 x 0.90 m Poplin/Terycot • 2 Brown sheet 	

PROCEDURE

Paper Pattern Drafting:

- Lay the brown sheet widthwise folded on the cutting table with its wrong side facing.

If required, attach excess brown sheet lengthwise to suit the length of churidar.

- Draw the drafting of churidar for the given measurements with the help of the instructions for drafting (Fig 1).
- Draw smooth curve joining the points 6 - 14 - 9 - 10 - 11 - 12 for perfect fitting.

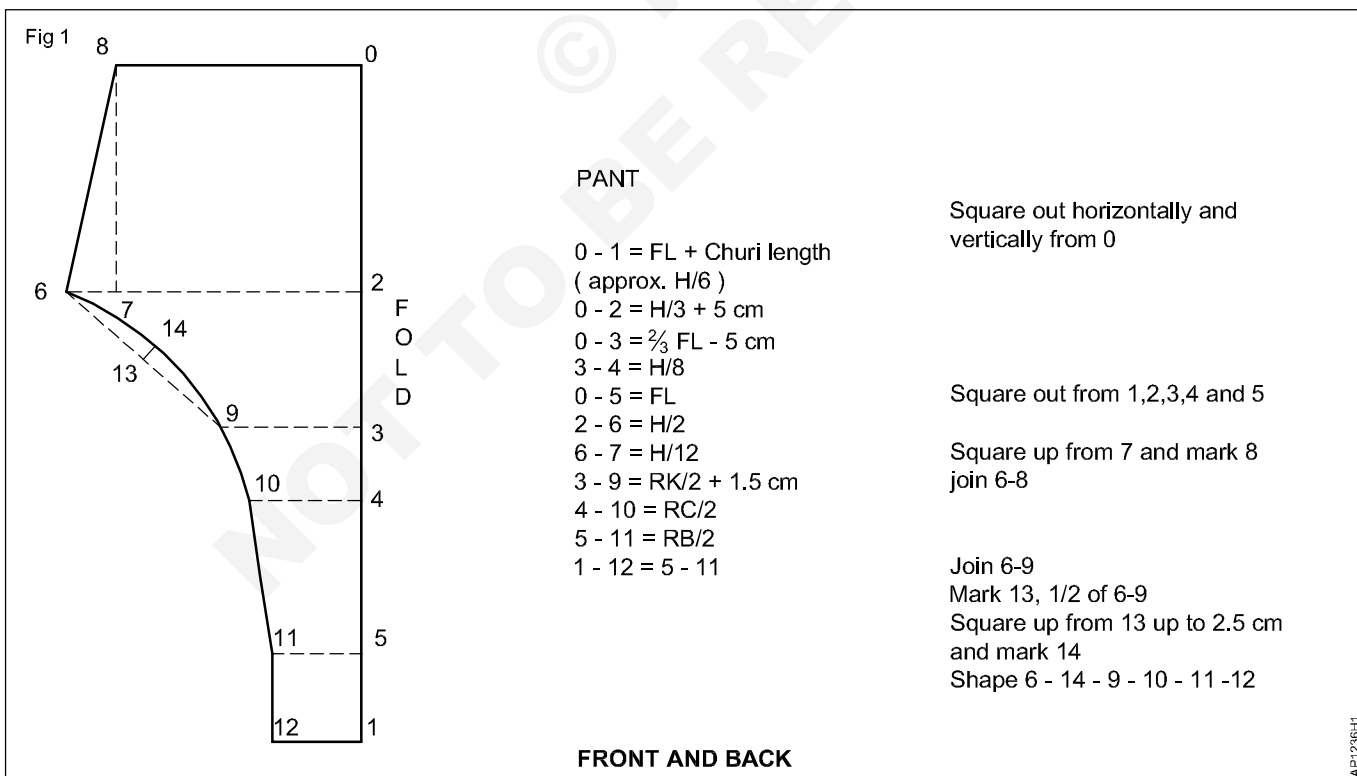
Paper Pattern Cutting

- Cut the prepared paper pattern along the following cutting lines, leaving enough space around them.

Front and Back → 0 - 8 - 6 - 14 - 9 - 10 - 11 - 12 - 1

Master Pattern

- Lay a brown sheet and draft the master pattern from the cut paper pattern.
- Add the allowances as mentioned in the instructions for master pattern to the cut paper pattern components for seam allowances, turnings, openings etc.



INSTRUCTIONS FOR MASTER PATTERN

Crotch line	1.5 cm
Inside leg seam	2 cm
Fold-down casing on waist	5 cm
Bottom for hem	2 cm

Balance marks on knee line (9)
calf line (10)
bottom line (11)

- Balance marks on knee line (9), calf line (10), bottom line (11)
- Cut the excess brown sheet to get the master pattern of curidar.
- Name the cut master pattern components with its descriptions for future reference.

Layout and Cutting

- Use the given measurement and estimate the material required by following the formula for calculation (width of cloth = 0.90 m).

Material required

$$= \frac{\text{Length of bag} \times \text{width of bag}}{\text{Half width of cloth}}$$

Length of bag = Full length + bottom turning + casing turning + churi

Width of bag = Half hip + half knee round + two seam allowances

Cloth required =

- Prepare the bias bag and layout the component mark and cut the cloth (SS No. 1)
- Fold and tie the cut components together, which are ready for stitching.

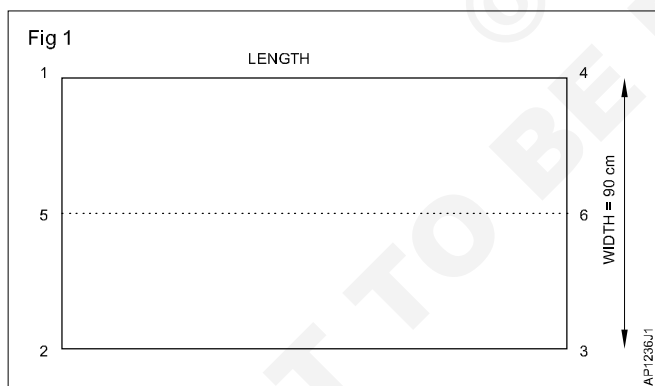
Skill sequence

Bias bag

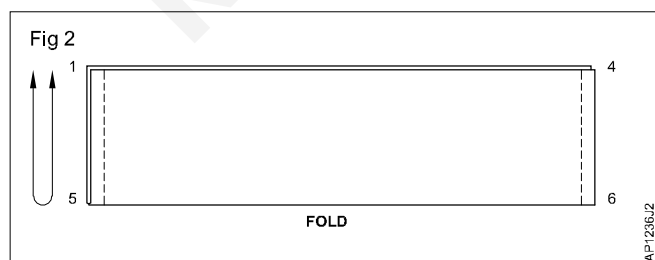
Objectives: This shall help you to

- prepare the bias bag, to layout, mark and cut the cloth.

1,2,3,4 is the material for bag. 1 - 2 is the width and 1-4 is the length of cloth. (Fig 1)



Fold the material from center in length i.e. at point 5 - 6. By this we get the size 1,4, 6,5 (Fig 2)



Stitch at 1 to 5 and 4 to 6, allowing 1 cm seam allowance by double stitching.

To adjust the width of bag, take

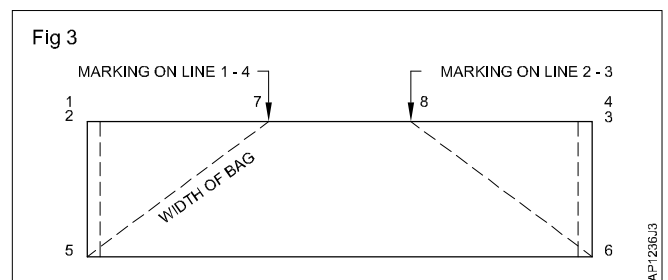
$$\frac{H}{2} + \frac{RB}{2} + 2 \text{ cm}$$

On line 1 - 4 measure from 5 and mark 7.

5 - 7 = width of bag (Fig 3)

On line 2 - 3 measure from 6 and mark 8.

6 - 8 = 5 - 7 = width of bag



Fold the piece at 7 and 8. (Fig 4)

After that procedure open edges are on 7 - 9 - 8 - 10. Start stitching from 10.

Join 10 - 8 - 9 with 10 - 7 - 9 (stitching along the selvage) Make a cut at 5 and open upto 7, i.e. on width of bag. Repeat for other end of width (6-8). Now you have prepared a cylinder.

Sew a salwaar

Objectives: At the end of this exercise you shall be able to

- stitch a belted salwar
- make bottom cuff with stiffening and decorative finish.

Style Features

- Gathered front and back
- Decorated bottom finish

Materials and Trimmings

- Cut components of Salwar

- Canvas 0.05 x 0.90m
- Matching colour thread
- Machine needle no.16

Fig 1



AP1235E1

Instructions for Master Pattern

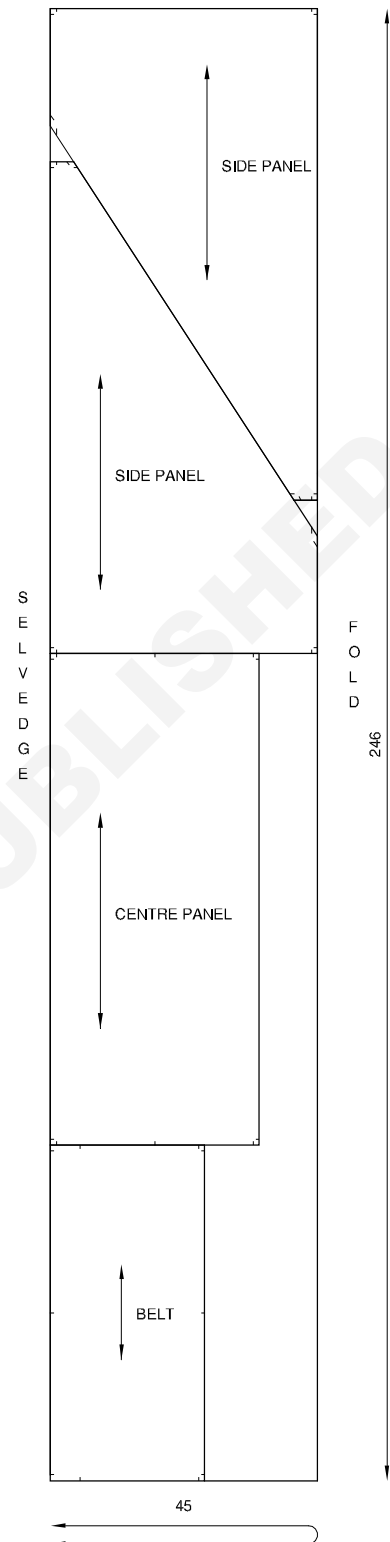
Belt waistline for fold-down casing	5 cm
All other sides	1 cm

- Mark the master pattern allowances and then cut the excess brown sheet to get the master pattern of salwar with waistband.
- Name the cut pattern components for future reference.

Layout and Cutting

- Follow the given measurements and calculate the material required. (Formula: 2 length of salwar + 1 length (body rise-belt) + 8 cm for shape + 5 cm for fold down casing + 3 cm for seam).
- Lay the salwar fabric widthwise folded on the cutting table with its wrong side facing.
- Arrange the patterns of salwar components side panel, centre panel and waist band.
- Mark the outline of the laid patterns on the fabric using tailor's chalk.
- Similarly, draw required no: of components of salwar, check the pattern positions for grain lines. Remove the master pattern .
- Mark and cut notches at centre of centre panel.
- Cut along the marked lines with sharp shears .
- Fold and tie all the components of salwar together, to prevent it from missing.

Fig 2



CUT COMPONENTS

SIDE PANEL	4
CENTRE PANEL	2
BELT	2

AP123412

Draft and cut salwaar

Objectives: At the end of this exercise you shall be able to

- calculate the material required for a salwar
- draft and cut the paper pattern of salwar
- prepare master pattern
- lay and cut the salwar components for stitching.

Measurements (Medium size)	
Full Length = 100 cm Hip = 100 cm Bottom = 38 cm	Material 2.50 x 0.90 m Poplin/Terycot 2 Brown sheets

PROCEDURE

Paper Pattern Drafting

- Lay the brown sheet widthwise folded on the cutting table.
- Draw the drafting of side panel, centre panel and waistband of salwar on the brown sheet, following the instructions for drafting.

Pattern Cutting

- Cut the prepared paper pattern along the following cutting lines.
- Cut the pattern along the following cutting lines.

Waist Band → 0 - 8 - 9 - 2
Centre Panel → 2 - 3 - 4 - 1
Side Panel → 3 - 9 - 5 - 6 - 7 - 4

Master Pattern

- Lay the other brown sheet and mark the outline of the waist band paper pattern. Remove the pattern and add the master pattern allowance to it.
- Similarly lay the other components one by one and draft the master pattern.

Fig 1

INSTRUCTIONS FOR DRAFTING

0 - 1 = FL

0 - 2 = $\frac{H}{4} - 5$ cm

2 - 3 = 1 - 4 = $\frac{H}{6}$

3 - 5 = $\frac{\text{Width of cloth}}{2} - 2$ cm

5 - 6 = $\left\{ \frac{H}{3} + 5 \right\}$ - belt

1 - 7 = $\frac{\text{Bottom}}{2}$

0 - 8 = 2 - 9 = $\frac{H + 8 \text{ cm}}{4}$

2 - 10 = $\frac{1}{2}$ of 2 - 9

Square out horizontally and vertically from 0

Square out from 1 and 2

Square down from 5

Join 6 - 7

For unbelted salwar panels must be extended up to waistline

Marks for gathering in front

AP1234H1

PROCEDURE

The cut components of salwar are the following

Side Panel 4

Centre panel 2

Belt 2

- Join straight sides of side panels with centre panel, for both leg parts.
- Make bottom cuff with stiffening. (SS.No.1)
- Make ease stitches, 1 cm below upper edge of stitched leg pieces.
- Match centre front and centre back of leg piece and belt.
- Adjust the width of the leg piece with belt piece by gathering the fabric between the marks.

First gather, then pin belt to leg piece and set additional gathers for adjustment in the same operation.

- Stitch with double seam.
- Repeat the process for other leg.
- Stitch inside leg lengths.
- Join crotch by double seam.
- Cut excess material from bottom seam allowance.
- Finish by making fold-down casing at top of belt.
- Prepare a tying string of 1-1.5 cm width from balance material. Length of string must be at least 15 cm longer than belt girth.
- Press the garment.

Bottom finish

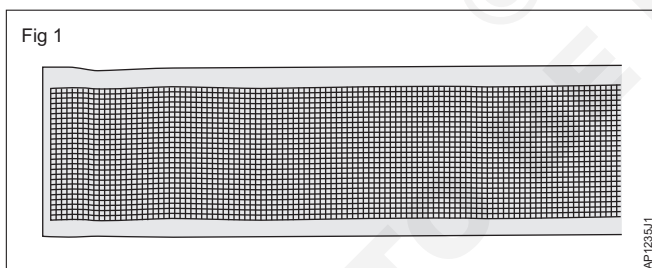
Objectives: This shall help you to

- **make decorative bottom cuff with stiffening.**

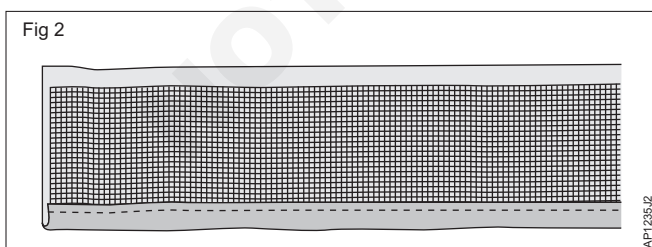
Cut two strips of canvas/stiffening material (size: width of bottom + 5 cm for shape and seam; 5 cm length.)

Cut 2 pieces of cloth from remaining fabric (width is same as canvas, length is 7 cm).

Place canvas piece over a strip of cloth on wrong side at a distance of 1 cm from each long edge. (Fig 1)

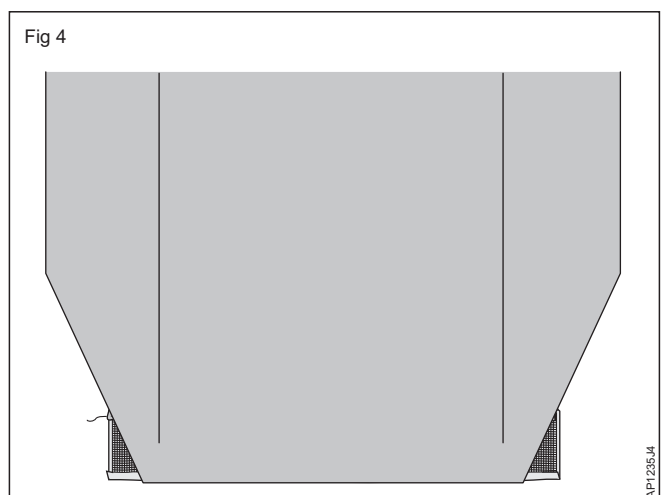
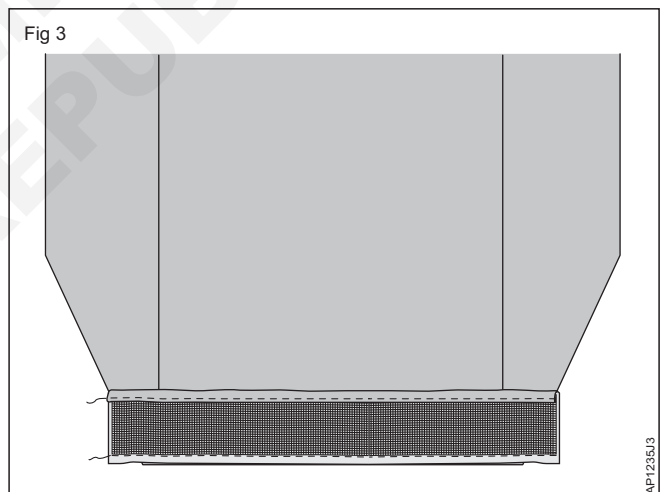


Turn 1 cm cloth over canvas strip and stitch 5 mm from edge.(Fig2)

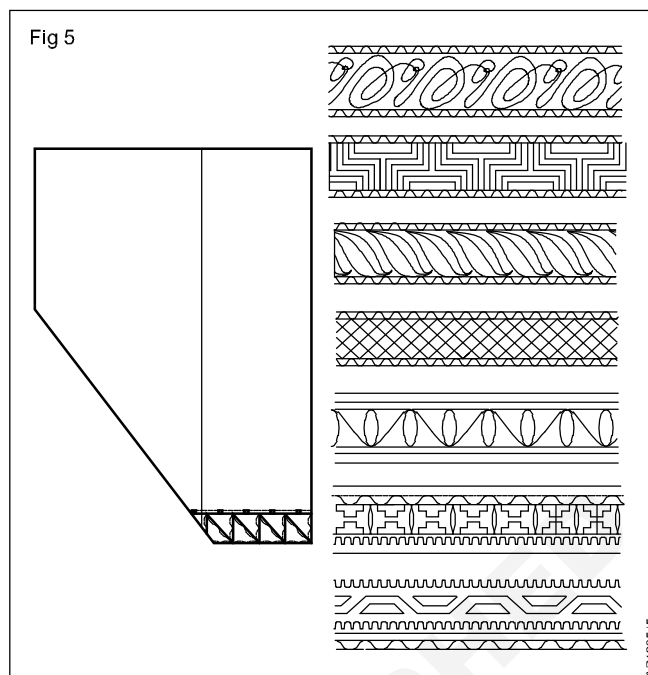


Place bottom strip over bottom of leg panel, with right sides together and stitch. (Fig 3)

Now turn bottom strip towards underside (wrong side of panel will match with wrong side of strip now) and stitch from right side at upper edge of bottom strip. (Fig 4)



Decorate bottom with different decorative stitches with fashion maker machine or draw design on the cuff and stitch it with treadle machine. (Fig 5)



Construct a ladies' suit - Style I

Objectives: At the end of this exercise you shall be able to

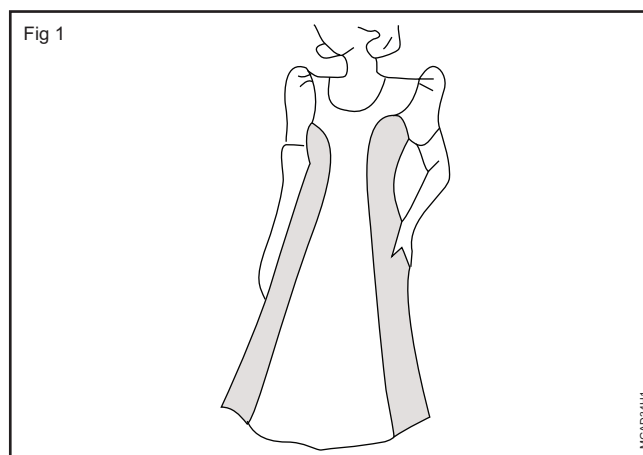
- draft and cut a kameez with princess line
- sew a kameez
- draft and cut a salwaar
- sew a salwaar.

Measurements	Material
Full length = 102cm Chest = 86cm synthetic material Shoulder = 34cm Sleeve length= 12cm	235 cm x 92 cm poplin, cotton, any Waist length = 72cm

PROCEDURE

TASK 1 : Draft and cut a kameez with princess line

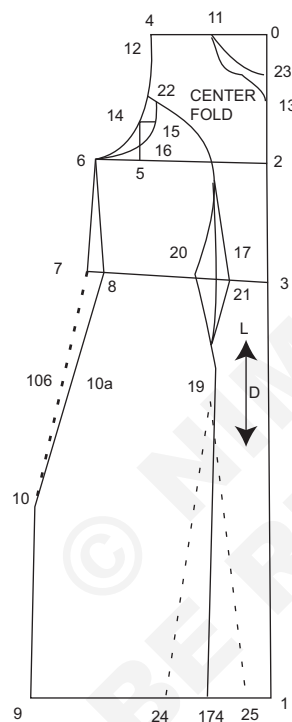
1. Lay the brown sheet on the drafting table with its wrong side facing upwards.
2. Draw the drafting of kameez front and back body part and sleeve part on brown sheet. (Fig 1)
3. Give flare as show (Fig 1).
4. Draw sleeve on the folded brown sheet.
5. Use L-square and French curve / curve stick for perfect shape of drafting.



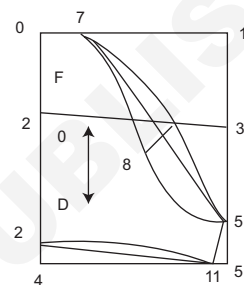
Measurements	Material
Princess line Leg-o-mutton sleeve Back Zip open	Cut components of princess line Kameez Center front - 1 Center back 1 Side piece 4 Sleeve 2 Placket piece - 2 Facing piece 2 10cm zip - 1 Notcher

Fig 1

FRONT & BACK



LEG - O - MUTTON SLEEVE



Front and Back

- 0 - 1 = Full length
- 0 - 2 = $B/4 - 2.5\text{cm}$
- 0 - 3 = waist length
- 0 - 4 = $\frac{1}{2}$ shoulder
- 2 - 6 = $B/4 + 2.5\text{cm}$
- 7 - 8 = 1.5cm
- 1 - 9 = $B/4 + 15\text{cm}$
- 9 - 10 = $B/3$
- 10 - 19a = $\frac{1}{2}$ of 8 - 10
- 10a - 10b = 1cm
- 0 - 11 = $B/2$
- 4 - 12 = 1.5cm

Square out horizontally and vertically from 0

Square out from 2,3 and 1

Square down from 4 and mark 5

Square down from 6 and mark 7

Join 6 - 8

Join 8 - 10

Shape 8 - 10b - 10

Join 11 - 12 (shoulder slope)

Shape 11 - 13 for front neck line.

0 - 13 = B/8

5 - 14 = 1/3 of 12 - 5

14 - 15 = 1.25cm

5 - 16 = 2cm

3 - 17 = B/12

+ 1.25cm

1 - 17a = B/12 + 1.25cm

3 - 17 = 17 - 21 = 1.25 cm

DART

17 - 18 = 17 - 19 = c/6

17 - 20

17 - 21 = 1.5cm

12 - 22 = 1/2 of 12 - 5

17 - 20 = 17 - 21 = 1.5 cm

Back

0 - 23 = 7cm or to taste

23 - 23a = 10cm or to taste for back open

LEG - O - MUTTON SLEEVE

0 - 1 = B/8 + 6.5cm

0 - 2 = 6.5cm

1 - 3 = 0 - 2

2 - 4 = 3 - 5 = Sleeve length

3 - 6 = B/8

0 - 7 = 4cm

8 is mid point of 6 - 7

8 - 9 = 1.5cm

6 - 10 = 2cm

5 - 11 = 2.5cm

4 - 12 = 1.5cm

Square out from 14

Join 12, 15, 16, 6 for front armhole

Shape

Join 17 - 17a

Join 18 - 19 and 17a

Join 18 - 20 - 19, 18, 21, and 19

Shape 12 - 18 for princess line.

Outlines, princess line are same as front.

Shape 11 - 23 for neck.

Join 12, 22, 6 for armhole shape

Square out horizontally and vertically from 0

Join 6 - 7

Join 0, 7, 9, 6 for back sleeve

Join 0, 7, 8, 10, 6 front sleeve shape

Join 6 - 11

Shape 11 - 12

Pattern cutting

Cut the prepared paper pattern along the following cutting lines, leaving space as specified in the instructions for preparing master pattern.

Center piece front = 1 - 24 - 19 - 21 - 18 - 22 - 12 - 11 - 13

Center piece back = 1 - 24 - 19 - 21 - 18 - 22 - 12 - 11 - 23

Side piece front = 22 - 18 - 20 - 19 - 25 - 9 - 10 - 10b - 8 - 6 - 16 - 15-22

Side piece back = 22 - 18 - 20 - 19 - 25 - 9 - 10 - 10b - 8 - 6 - 14 - 22

Sleeve front line = 0 - 7 - 8 - 10 - 6 - 11 - 12

Sleeve back line = 0 - 7 - 9 - 6 - 11 - 12

Master pattern

1. Add the following allowances to cut paper pattern components for seam allowances and turnings.

Instructions for master pattern

<u>Center piece</u>	<u>Side piece</u>	<u>Sleeve</u>
Front and Back	Front and Back	Top - 1cm
Neck and armhole	armhole 0.75cm	side - 2.5cm
Shoulder - 1cm	Princess line 1cm	bottom - 2cm
Sides - 1cm	side - 2.5cm	
Bottom - 2.5cm	Bottom - 2.5cm	

2. Cut the excess brown sheet to get the master pattern of kameez with princess line.
3. Mark and cut notches on the seam allowances and folding
4. Name the cut components for future reference

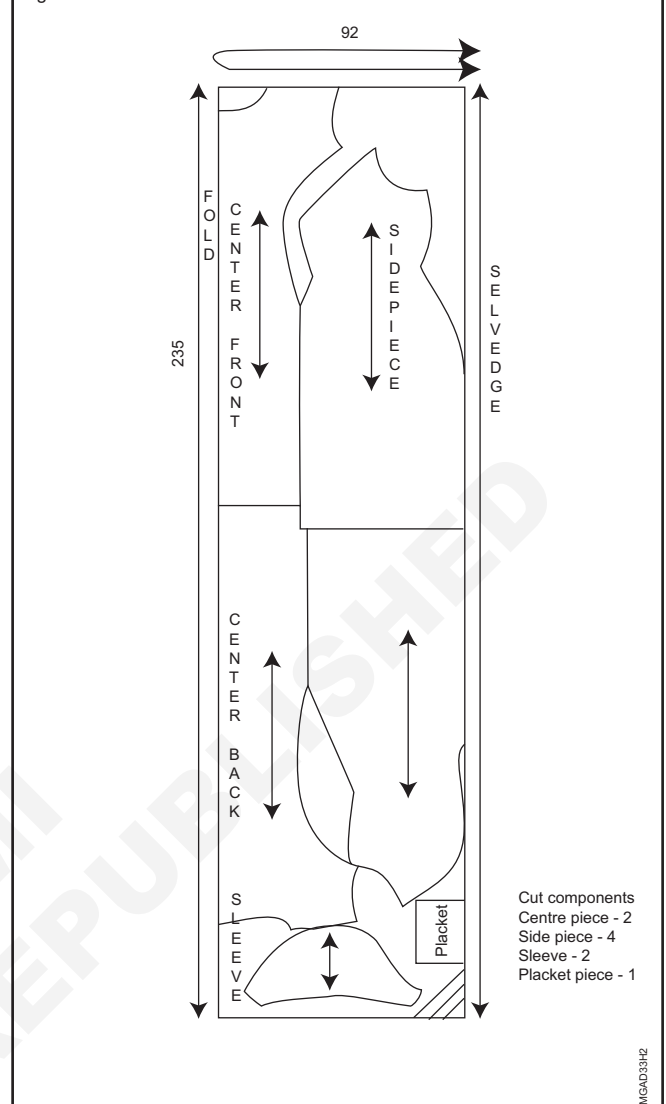
Layout and cutting

1. Lay the fold fabric on width on the cutting table with their wrong side facing upwards
2. Arrange the master pattern of princess line kameez economically without wasting the material (Fig 2)

TASK 2: Sew a kameez

1. Join center and sidepieces at the princess line with princess seam.
2. Finish the front neck with facing.
3. Finish the back open with zipper placket. (S.S.No.2)
4. Stitch zipper placket with the use of zipper foot machine attachment.
5. Finish the back neck with facing.
6. Join front and back shoulder together in the wrong side.

Fig 2



3. Mark the outline of all the kameez components as lay using a marking chalk.
4. Mark the back open position at back center piece on the fabric
5. Remove the master pattern. Transfer the mark to the lower layer of the fabric.
6. Cut the components and pin all the layers together.

7. **Prepare leg - o mutton - sleeve:** Make two rows of case stitches at upper sleeve shape, 1st at a distance of 0.5cm, 6-7cm from the raw edge and stop also 6-7cm before the other edge. Leave long threads.
8. Pin the center of sleeve crown on shoulder, with right sides together and leaving seam allowance.

Take care that front sleeve and front bodice match.

- 9 Gather on sleeve crown on both sides of shoulder seam while pulling the long thread ends from both sides.
- 10 Pull until the girth of sleeve is equal with the girth of armhole.
- 11 Baste sleeve to bodice armhole, then stitch with machine.

- 12 Finish the sleeve bottom by turning and stitch it.
- 13 Join from sleeve bottom side to front and back sides together with seam allowance leaving slit opening on both sides on marks
- 14 Finish the slit If slit is not necessary the stitch the front and back sides up to the bottom.

Princess seam

Objective: This shall help you to

- join princess cutting line.

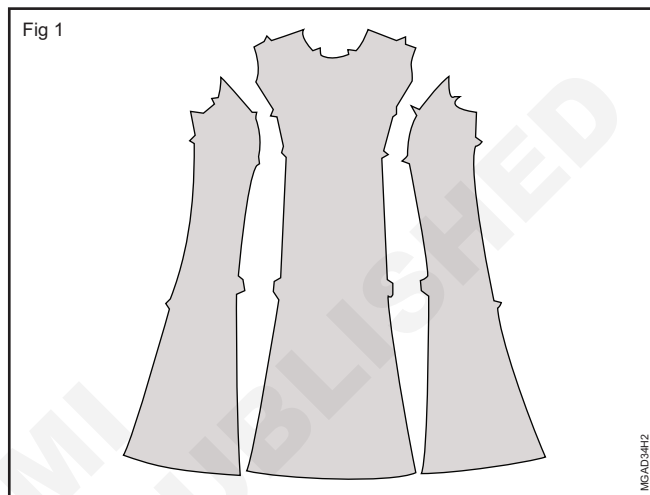
Princess seams

Princess seams are shaped seams designed to fit the body's contours. Beginning at shoulder or arm-hole, front or back, and running lengthwise, they may go just to the waistline seam or extend all the way to the hem. A typical princess seam will curve outward to accommodate the fullest part of the bust or back, then inward to conform to the waist, and finally outward again to fit over the hips.

Careful checking of fit, pattern adjustments and marking are necessary if the curves of the seam are to follow the contours of the body. Proper use of clipping and notching will permit the curves to lie smoothly against the body. Pressing should be done over a tailor's ham: its rounded shape helps to retain and mould curves as seam is pressed.

1. Place a row of reinforcement stitches just inside the seam lines of the centre panel. From the top edge to just below bottom notch. Clip between notches.
2. With side panel on top. Match and pin the seam line spreading the clipped edge to fit. Make additional clips if necessary, Tack in place.
3. With clipped side up stitch on the seam line beyond the ends of the clips being careful to keep the underside smooth. Backstitch at both ends of seam.
4. Remove tacking and finger-press the seam open. Notch out fullness from the inward curve. Wherever possible, stagger positioning of clips and notches.
5. Close seam and place over a tailor's ham. With tip of iron, press seam flat. Do not press into the body of the garment, especially in the curved areas.
6. Press the seam open over a tailor's ham. Reposition the seam whenever necessary to keep the curve of the ham matched to the curve of the seam. (Fig 1)

Every princess seam consists of two separate edges curved in a precise relationship to each other. When joined, the seam shapes itself around the contours of the body. An entire dress front, as illustrated above and at left, will have a centre panel and two identical side panels, together producing a princess seam on each side of the garment front. Transfer all markings carefully to fabric before removing pattern. (Fig 2)



Princess seam

Objective: This shall help you to

- **stitch a zipper placket.**

Take the back part and take a zipper of 10cm length. Mark 10cm for slash on the centre line from right side of the cloth. Cut a strip of 13*5cm (length of strip should be app. 3cm more than the zipper length).

Fold and press strip on the centre. Match the centre line of strip with back part with the right sides together. Baste on the slash mark through both the layers and all around the strip edges.(Fig 1)

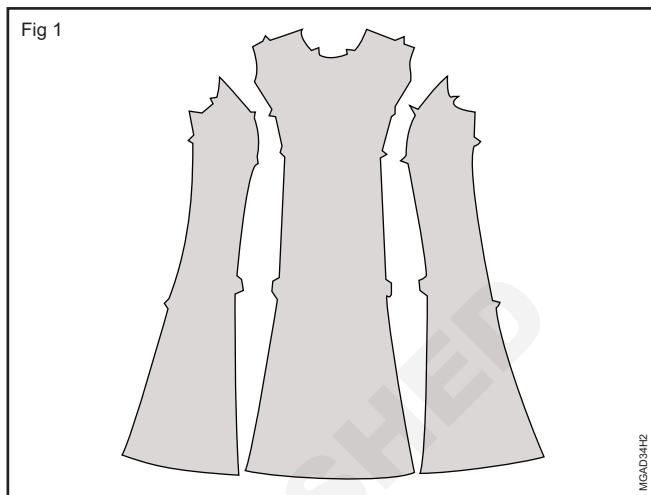
Stitch from left side round the slash mark at a distance of teeth width plus 2cm. Slash on slash mark, stop 1cm before the end and clip to the corners. Remove the basting

Turn the strip pieces towards wrong side of the back part. Press and fix with basting. Set the zipper on slash line. Baste zipper below the slash edges and stitch all around.

How to adjust the zipper length? Zips are available in different length, but they will not always match the required slit length of the placket. In that case you have to use a zipper longer than the placket length and to shorten it.

Shorten zipper at the lower end. Tack at the required length and trim zipper 1.5cm below tacking.

Fig 1



MGAD34H2

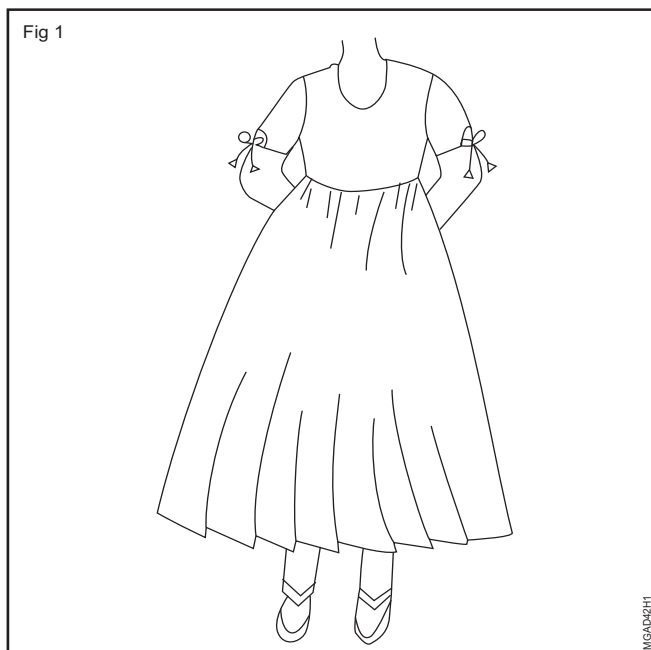
TASK 3 : Draft and cut a kameez (Umbrella with yoke style)

Measurements	Material
Full length = 105cm	3.76 x 0.92 m Cotton, poplin, synthetic material
Bust = 89cm	
Waistround = 75cm	
Shoulder width = 32cm	
Sleeve length = 16cm	
Bodice length = 37cm	

Paper pattern drafting

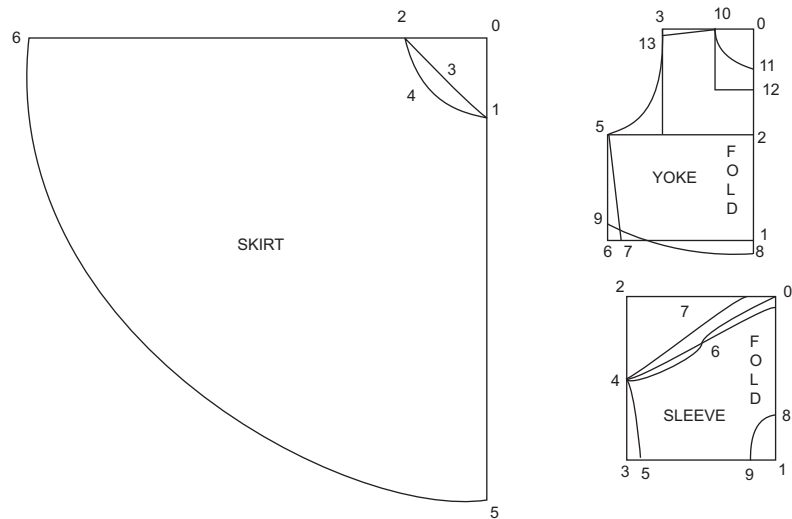
1. Lay the brown sheet on the drafting table.
2. Draw the drafting of body part, skirt part and sleeve part of umbrella with yoke on the brown sheet, using measuring tape and L square. (Fig 1)
3. Use L-square and French curve / curve stick for perfect shape of drafting.

Fig 1



MGAD2H1

Fig 1



MGAD41H1

Yoke part

0 - 1 = Bodice length

0 - 2 = B/4

0 - 3 = $\frac{1}{2}$ shoulder

2 - 5 = B/4 + 4cm

6 - 7 = W/4 + 2.5cm

1 - 8 = 2cm

6 - 9 = 2cm

0 - 10 = B/12

0 - 11 = B/12 + 1cm

0 - 12 = B/2 + 4cm

3 - 13 = 1.5cm

4 is square down from 3

6 is square down from 5

Shape 8, 9 for bottom.

Shape 10, 11 for back neck

Shape 10, 12 for front neck

Skirt part:-

0 - 1 = W/6 + 2cm

0 - 2 = W/6 + 2cm

3 - 4 = 2cm

1 - 5 = full length - bodice length

2 - 6 = full length - bodice length

Join 10 - 13

Join 1 - 2

3 is mid point of 1 - 2

Shape 5, 6

Sleeve:-

0 - 1 = sleeve length

0 - 2 = B/4

2 - 4 = B/8

3 - 5 = 1.5cm

6 - 7 = 1.5cm

1 - 8 = 5cm

3 is square down from 2

Join 0 - 4

6 is mid point of 4 - 0

Shape 4, 7, 0 for back arm

Shape 4, 7, 0 for front arm

Shape 8, 9

Pattern cutting

Cut the prepared paper pattern along the following cutting lines, leaving space as specified in the instructions for preparing master pattern with paper cutting scissors.

Body part back = 11 - 10 - 13 - 5 - 9 - 8

Body part front = 12 - 10 - 13 - 5 - 9 - 8

Skirt part = 2 - 4 - 1 and 6 - 5

Sleeve back = 0 - 7 - 4 - 5 - 9 - 8

Sleeve front = 0 - 6 - 4 - 5 - 9 - 8

Master pattern

1. Add the following allowances to the cut paper pattern components for seam allowances and turnings.

Instructions for master pattern

Body part :-Shoulder - 7.5cm

Armhole - 7.5cm

Neck - 0.5cm

Side seam - 2.5cm

Bottom - 1cm

Skirt part:-

Top = 0.75cm

Bottom = 3cm

Sleeve:-

Top = 5cm

Side seam = 2.5cm

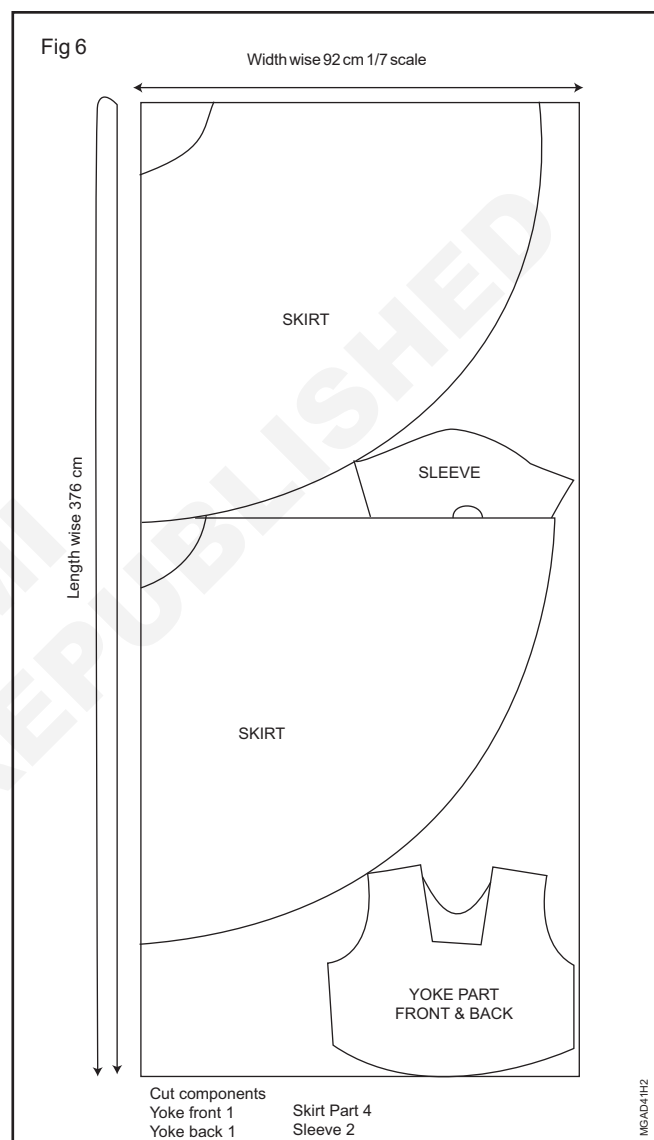
Bottom = 0.5cm

2. Cut the excess brown sheet to get the master of umbrella with yoke.
3. Name the cut pattern components for future reference.

Layout and cutting

1. Lay the open fabric on the cutting table on length wise folding with wrong side facing.

2. Arrange the master pattern of umbrella with yoke economically without wasting the fabric. (Fig 6)
3. Mark the outline of umbrella with yoke components as laid with marking chalk.
4. Remove the master pattern.
5. Cut along the marking line with sharp shears.
6. Pin all the layers of components together for stitching.



Style Features	Material & Trimmings
Umbrella with yoke	Cut components of kameez
Round shape	Front and back yoke
Bottom at sleeve	Umbrella skirt
Center with piping	Sleeve 2
	Material color thread
	Needle, Hook - 1

TASK 4 : Sew a kameez (Umbrella with yoke style)

- 1 Finish the front neck with shaped facing.
- 2 Finish the back neck with faced placket. (S.S.No.1)
- 3 Join front and back shoulder.
- 4 Finish the sleeve bottom center round shape with binding.

Then stitch the bias binding on bottom from side to center and extend the bias strip to 10 to 15cm on both sides to tie the ends. Finish the raw edge with tube bells.

- 5 Stitch the sleeve side seam.
- 6 Join front and back yoke sides.

- 7 Set the sleeve on yoke with set in sleeve method.
- 8 Join umbrella skirt sides.
- 9 Finish the skirt bottom with 3cm wide circular hem. (S.S.No.2)
- 10 Baste and stitch the skirt with yoke part matching centre and sides.
- 11 Stitch hook end eye on placket.
- 12 Finish the raw edges of seam allowance with over lock stitch.
- 13 Trim off thread end.
- 14 Finish and press the garment.

Nighty

Objective: At the end of this exercise you shall be able to

- draft and stitch a nighty using different methods of pattern making.



Measurements

Full length = 135 cm
Bust = 92 cm
Across back = 38 cm
Sleeve length = 26 cm

Material

3.50 x 0.90 m Rubia (Cotton)

Instructions for drafting

0-1 = FL

0-2 = $B/4 - 2.5 \text{ cm}$

1-3 = $FL/10$

2-4 = $B/4 + 4 \text{ cm}$

0-6 = $AB/2$

0-8 = $B/12$

6-9 = $B/36$

0-10 = $B/12 + 1.5 \text{ cm}$

0-11 = $B/8$

7-12 = $1/3$ of 7-9

12-13 = 1.25 cm

7-14 = 2.5 cm

2-15 = 2.5 cm

7-16 = $1/2$ of 7-12

2-17 = $B/8$

Square out horizontally and vertically from 0

Square in and out from 1,2,3

Square down from 4 and mark 5

Square down from 6 and mark 7

Join 8-9

Shape 10-11 (front neck)

Square out from 12

Divide angle 12-7-4

Shape 9-13-14-4 (front armhole)

Square down from 17 and mark 18-19

17-20 = 2.5 cm

5-21 = $3/4$ of 5-18

0-23 = $B/12$

7-24 = $1/2$ of 7-9

7-25 = $1/2$ of 4-7

Sleeve

0-1 = SL

0-2 = $Ch/4 - 2.5 \text{ cm}$

2-4 = $Ch/12 + 2.5 \text{ cm}$

3-5 = 4 cm

5-6 = 3 cm

1-7 = $1/3$ of 1-3

Shape 20-15-16

Square down from 21 and mark 22

Shape 23-10 (back neck)

Shape 9-24-25-4 (back armhole)

Extend the shape 20-15-16 and mark 26 (back yoke)

Square out horizontally and vertically from 0

Square down from 2, square out from 1 and mark 3

Join 4-5

Shape 1-7-6

For size and shape of sleeve

INSTRUCTIONS FOR MASTER PATTERN

Yoke

neck	no allowance
shoulder	1 cm
armhole	0.75 cm

Skirt

top	1 cm
armhole	0.75 cm
side and bottom	1 cm

Frill

top and at side	1 cm
bottom	1.5 cm

Sleeves

top	0.75 cm
side	?
bottom	1 cm

Note: Reduce the sleeve length according to the length of lace.

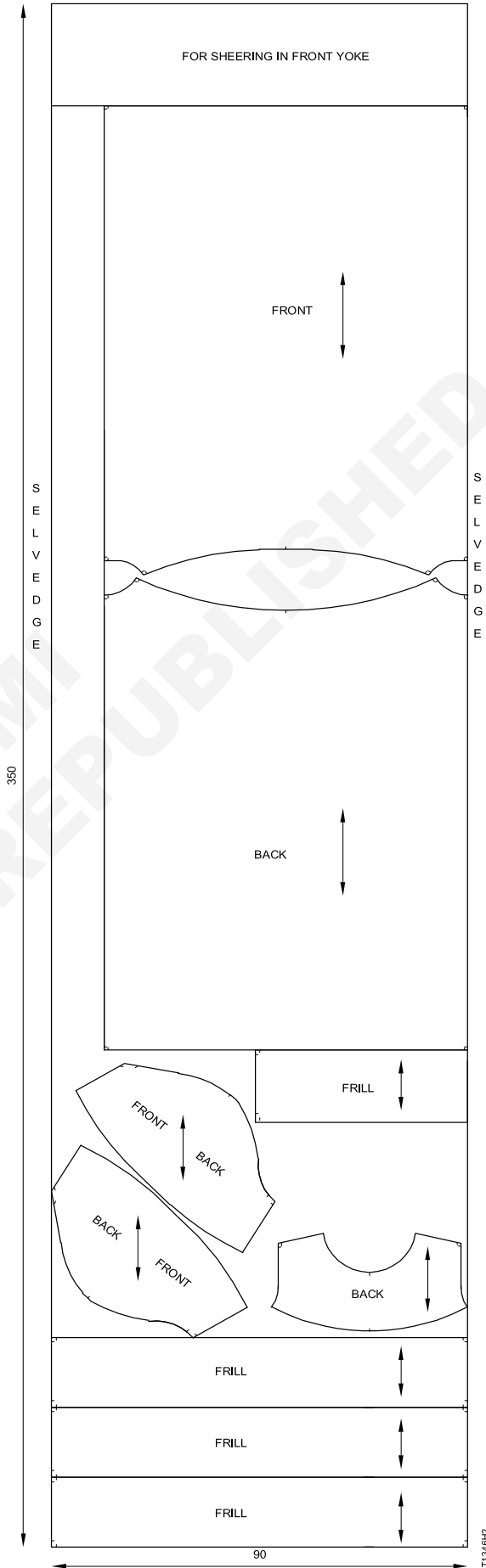
Instructions for master pattern

Cut components

Front yoke piece	1
Back yoke	1
Skirt	2
Sleeve	2
Frill	4

1. Prepare master pattern.
2. Layout on cloth, mark and cut front yoke piece for preparing shirring (Length of front yoke piece = yoke length + 5 cm. Width of front yoke piece = approximately 2.5 times yoke - width + seam allowance).
3. Prepare the shirring piece and lay the front yoke pattern on it, mark and cut. (SS.No.1).
4. Join the front and back shoulders together.
5. Finish the neck line with binding.
6. Finish the yoke bottom with binding.
7. Cut lace 1½ cm longer than the round shape measurement of yoke.
8. Stitch the side seam of skirt.
9. Prepare the frill with gathers.
10. Set the gathers in frill according to the skirt girth. Baste skirt and frill together and stitch it.
11. Stitch another row of stitches on right side at the joint of frill and skirt.
12. Make gathers on the top of skirt in front and back according to the width of yoke.
13. Set and baste the bottom edge of yoke on right side of skirt gathers, take care that the balance marks match.
14. Stitch in the crevice of the first stitching of binding.
15. Finish sleeve bottom with lace.
16. Prepare and set the sleeves in armhole.
17. Finish and press.

Fig 2



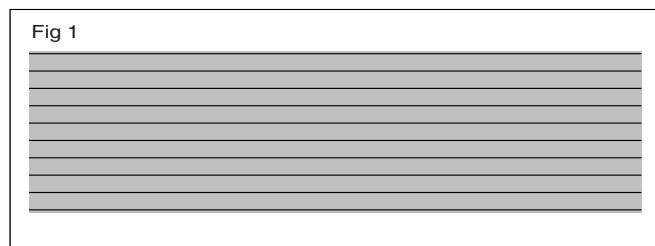
Shirring on yoke

Objective: This shall help you to

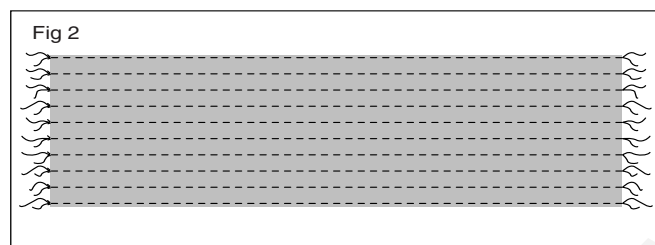
- to make shirring and set it according to the shape of yoke.

Take the strip which you already cut for the shirring (front yoke), ie. 90 x 28 cm. (Fig 1)

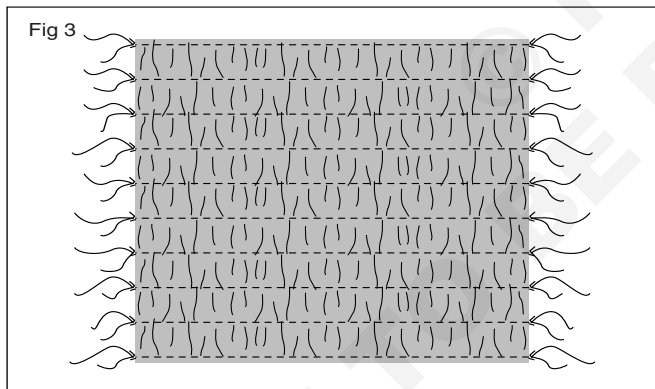
Mark at a distance of 0.5 cm from the both edges. Repeat marking at a distance of 3 cm continuously parallel to the previous line. (Fig 1)



Stitch ease stitching over the marked lines and tie the threads of each stitching line at one edge. (Fig 2)



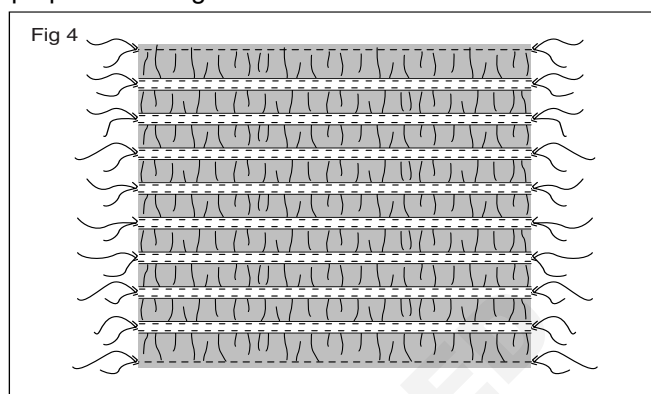
Pull the lower threads of all stitching lines together from other end and stretch up to the width of front yoke plus seam allowance. Tie the threads on other end. (Fig 3)



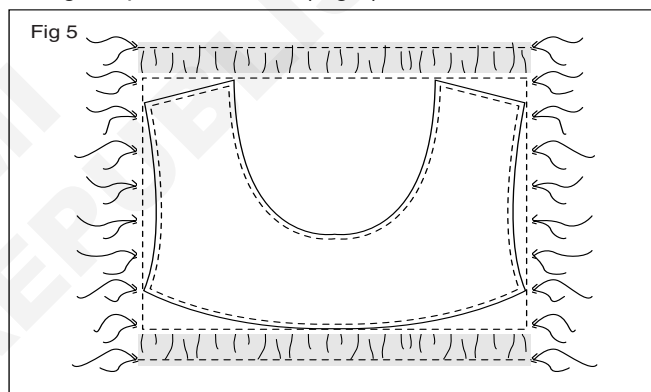
Be careful that the threads should be stretched equally so that the width of shirring is maintained from top to bottom

Baste and stitch the tape (0.5 mm wide) on each stitching line. (Fig 4)

Take a muslin cloth equal to the same length and width of prepared shirring.

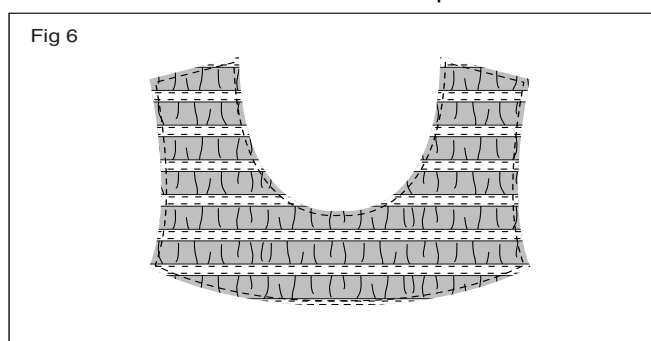


Set lays and mark the front yoke pattern on muslin cloth. Fix and baste the muslin cloth keeping pattern marks upwards on the wrong side of prepared shirring. Also baste along the pattern marks. (Fig 5)



Stitch inside very close to the marked line of pattern. (Fig 6)

Cut on the marked lines. Finish and press.



Block pattern

Objective: This shall help you to

- develop pattern for nighty from block.

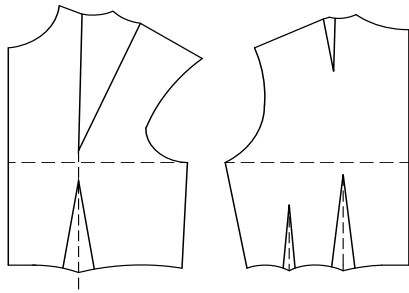
Use bodies block developed in Ex 45.

Trace and cut the bodies block back and front on the outer line. (Fig 1)

Determine dart position on scye on the mark fixed in pattern already for shaping armhole. Take a point on the middle of the distance between bust dart from shoulder and waist dart point and join with a curved line. (Fig 2)

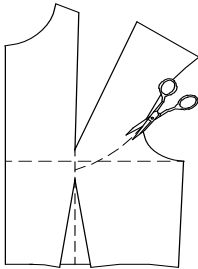
Slash on the drawn curved line and close the shoulder bust dart so that the dart gets transferred between yoke and skirt and the same shape is retained. Extend the slashed dart line in neat curved shape up to centre front line which will meet almost 2.5 cm below armhole depth level to form a round shaped yoke. (Fig 3)

Fig 1



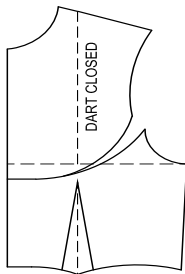
CT1346X1

Fig 2



CT1346X2

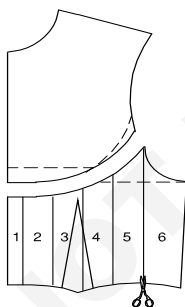
Fig 3



CT1346X3

Take the lower portion and draw a parallel line with centre front line 2 cm away and then draw four more parallel lines each at 4 cm distance which will meet from bottom line to curved shape on the top. Number each part in sequence 1-6 to avoid confusion. Slash on the lines and separate each part. (Fig 4)

Fig 4



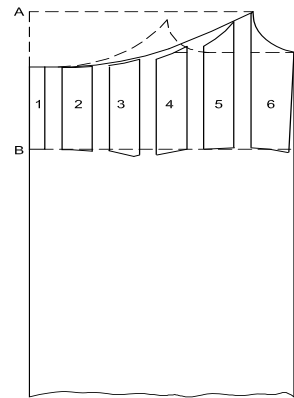
CT1346X4

Measure the maximum vertical extension of panel No.6 and mark from point A to B at a distance on the vertical line according to the taken measurement. Draw a horizontal square line from point B. Spread the panels on the horizontal line in sequence. Start from the vertical line and keep equal distance between each panel. Reshape the curve shape on top of panels.

Take care that two end points are joined with a perfect curved shape. The line may not cut any peak of the panels. It may occur that some panels are not touched by the line

Square down from armhole end point. On centre front line from top of 1st panel measure required length of nighty minus length of yoke length. Draw horizontal line at bottom. (Fig 5)

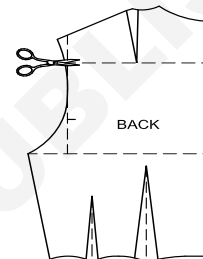
Fig 5



CT1346X5

Work now on back bodies block. Draw a line parallel to chest line from chest (armhole depth) line through end point of shoulder dart. (Fig 6)

Fig 6



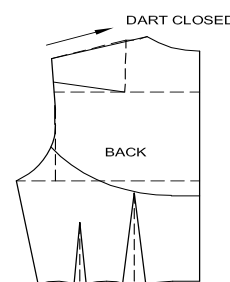
CT1346X6

Slash the line up to dart. Close the dart. Reshape shoulder line and armhole line.

Determine yoke point on armhole line at equal distance from chest line as in front.

Mark a point on centre back line 2.5 cm below chest line. Draw neat curved shape to form the yoke. (Fig 7)

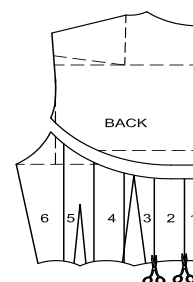
Fig 7



CT1346X7

For gathering of skirt portion apply same method as described for front portion. (Fig 8)

Fig 8



CT1346X8



Measurements

Length (waist to ankle) 60 cm
 Full length (back) = 132 cm
 Full length (front) = 135 cm
 Natural waist = 38 cm
 Chest = 92 cm
 Across back = 38 cm
 Across chest = 39 cm
 Sleeve length = 44 cm

Material

4.40 x 0.90 m
 Poplin/Terry fabric

Job sequence

Fig 1

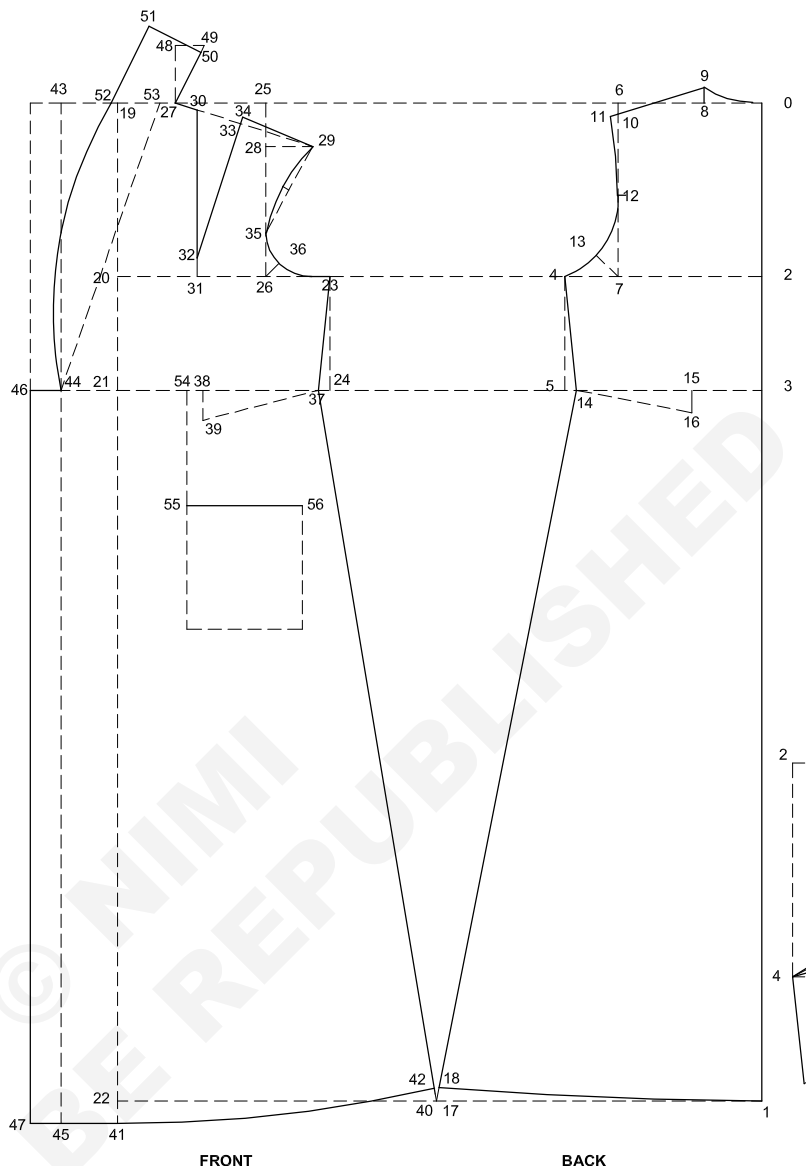
INSTRUCTIONS FOR DRAFTING

Back

- 0-1 = FL (back)
 0-2 = Ch/4
 0-3 = NW
 2-4 = Ch/4 + 3 cm
 0-6 = AB/2
 0-8 = Ch/12
 8-9 = 2 cm
 6-10 = 1.5 cm
 10-12 = 1/2 of 10-7
 7-13 = 1/2 of 4-7
 5-14 = 1.5 cm
 14-15 = Ch/6
 15-16 = 3 cm
 14-18 = 3-1
- Square out horizontally and vertically from 0
 Square out from 1,2,3
 Square down from 4 and mark 5
 Square down from 6 and mark 7
 Square up from 8
 Shape 0-9 (back neck)
 Join 9-10 and extend the line by 1 cm, mark 11
 Divide angle 12-7-4
 Shape 11-12-13-4 (back arm hole)
 Join 4-14
 Square down from 15
 Join 14-16
 Square down from 14, keeping 14-16 as guide line, mark 17
 Shape 1-18
 Shape 4-14-18, smooth shape at 14

Front

- Extend line 0-6, 2-4, 3-5 and 1-17
 1-17=17-22
 Square up from 22 and mark 21, 19
 20-23 = Ch/4 + 5 cm
 Square down from 23 and mark 24
 19-25 = ACh/2
 Square down from 25 and mark 26
 19-27 = Ch/12
 25-28 = Ch/16
 (Shoulder slope)
 Square out from 28
 27-29 = Back shoulder (9-11) + dart width (6 cm)
 Join 27-29
 27-30 = 3 cm
 Square down from 30 and mark 31
 31-32 = 2.5 cm
 30-33 = 6 cm
 Join 32-33 and extend upwards
 32-34 = 32-30
 Join 34-29
 26-35 = 1/3 of 28-26
 Join 29-35
 Divide angle 35-26-23
 26-36 = 1/2 of 23-26
 Shape 29-35-36-23 going inwards by 1 cm midway between 29 and 35 (front arm hole)
 Join 23-37
 24-37 = 1.5 cm
 Square down from 38
 37-38 = Ch/6
 Square down from 37, keeping 37-39 as guide line and mark 40
 38-39 = 4 cm
 Extend line 21-22



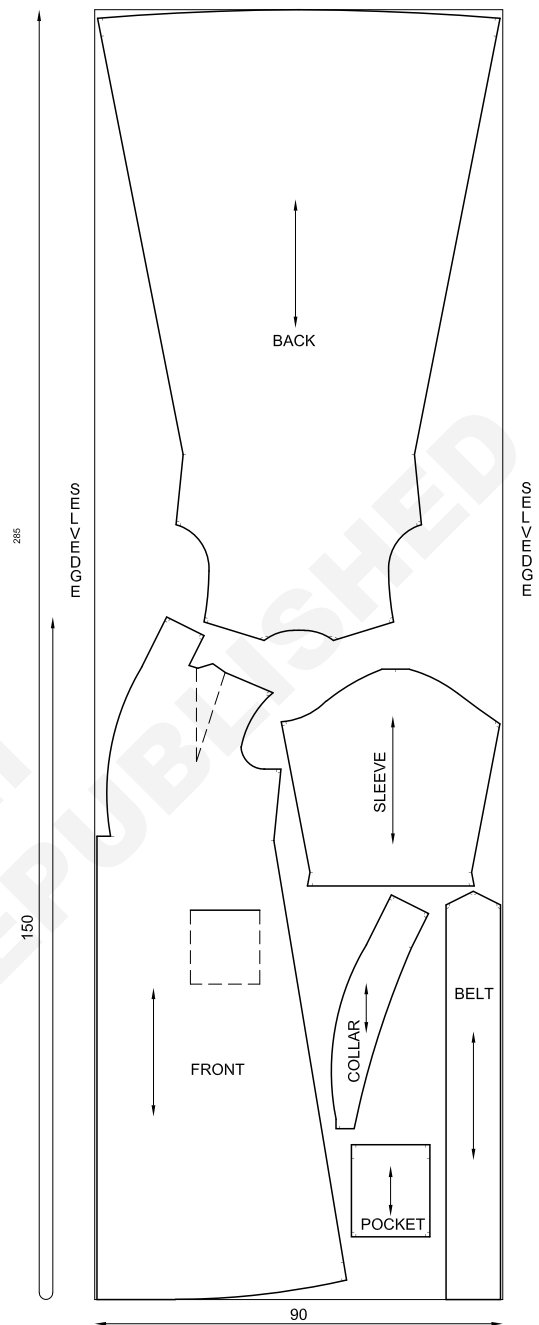
FRONT

BACK

- 22-41 = 3 cm
 37-42 = 21-22
 19-43 = 7.5 cm (overlap)
 44-46 = 4 cm
 27-48 = Ch/12
 48-49 = Ch/24
 27-50 = Measurement of back neck + 0.5 cm
 50-51 = Ch/12
 27-53 = 2 cm
 21-54 = Ch/12 + 1.5 cm
 54-55 = Ch/12
 55-56 = Ch/6
- Square out from 41
 Shape 41-42-40
 Reshape 23-37-42 same as 4-14-18 in back
 Square down from 43 and mark 44, 45
 Square up and down from 46 and mark 47
 Square up from 27
 Square out from 48
 Join 27-49
 Square out from 50
 Square down from 51, keep 50-51 as guide line and mark 52
 Shape 44-52-51 (lapel)
 Join 53-44 (break line)
 Square down from 54
 Pocket mouth

1. Prepare the pattern according to the pattern draft and the instructions for drafting. (Fig 1)
2. Layout the components on fabric and cut. (Fig 2)
3. Prepare patch pockets and attach them on both front sides.
4. Finish the shawl collar. (SS1)
5. Stitch the side seams of house coat.
6. Stitch sleeves and attach them with set-in sleeve method.
7. Hem the bottom of house coat.
8. Prepare belt.
9. Finish and press.

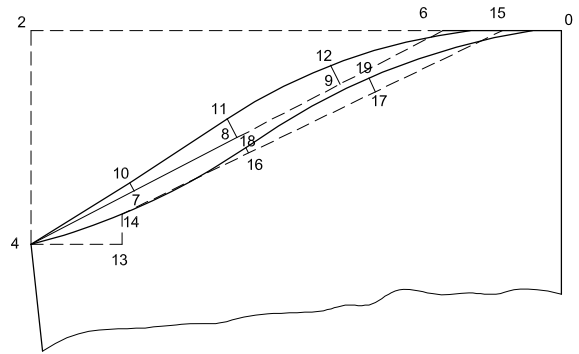
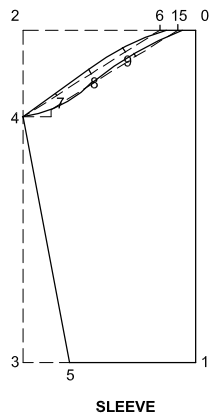
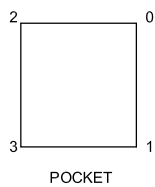
Fig 2



CUT COMPONENTS

FRONT	2	COLLAR	2
BACK	1	BELT	2
SLEEVES	2	POCKET	2

CT1244H2



Pocket

0-1 = Ch/6 + 1 cm
0-2 = Ch/6

Square out horizontally and vertically from 0

Square out from 1 and square down from 2 and mark 3

Sleeve

0-1 = SL
0-2 = Ch/4
2-4 = Ch/8
1-5 = Ch/6 + 1.5 cm

Square out horizontally and vertically from 0

Square out from 1 and 2 and mark 3
Square out from 4
Join 4-5

0-6 = Ch/24 + 1 cm

7-10 = 0.3 cm
8-11 = 0.7 cm
9-12 = 0.7 cm

4-13 = Ch/24
13-14 = 1 cm
0-15 = 1/2 of 0-6

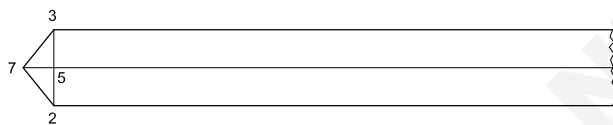
16-18 = 0.2 cm
17-19 = 0.5 cm

Join 6-4 and divide in four equal parts. Mark 7,8,9 and square up

Shape 0-6-12-11-10-4 (back shape)
Square up from 13

Join 15-14
Divide 15-14 into three equal parts. Mark 16,17 and square up

Shape 0-15-19-18-14-4 (front shape)



BELT

Belt

0-1 = 10 cm (belt width)
1-2 = 180 cm (belt length)
1-4 = 1/2 of 0-1
5-7 = 4-6 = 4 cm

Square out horizontally and vertically from 0
Square out from 1
Square up from 2 and mark 3
Square in and out from 4 and mark 5,6,7
Join 0-6, 6-1, 7-3, and 7-2

INSTRUCTIONS FOR MASTER PATTERN

Front and back

0.75 cm on outer shape at collar area, 1 cm on collar back
shoulder and armhole 0.75 cm
sides 2.5 cm
bottom 6 cm

Sleeves

top 0.75 cm
sides 2.5 cm
sleeve hem/turning 3 cm

Pocket

sides + bottom 0.75 cm
pocket mouth 3 cm
belt 0.75 cm all around

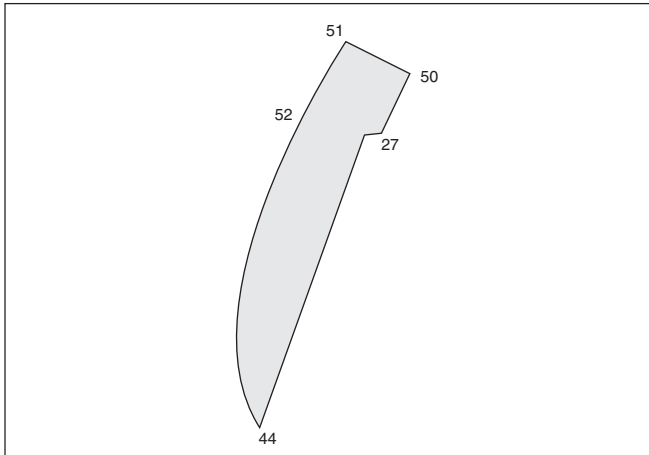
Collar

0.75 cm at outer edge
1 cm at neck edge.

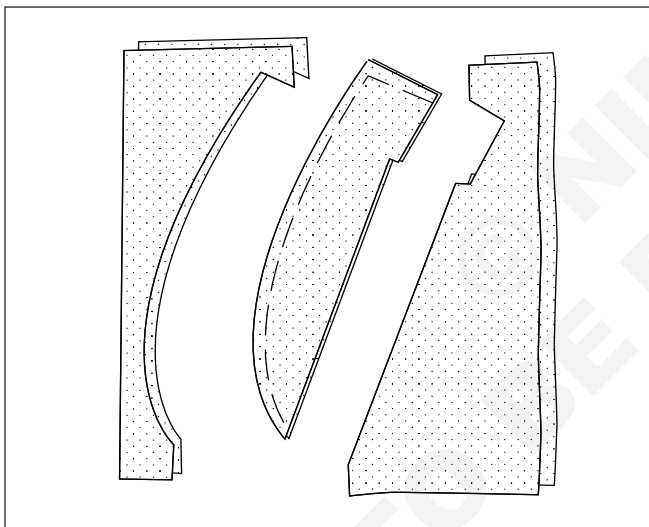
Shawl collar

Objective: This shall help you to
 • prepare shawl collar.

Prepare interlining piece. Copy the collar component pattern on brown paper, i.e. 27-50-51-52-44. Join 44-27. (Fig 1)



Add seam allowances for master pattern: 0.75 cm on outer round shape and 1 cm on collar back. Cut on double layer of the suitable interlining as per garment fabric. (Fig 2)



Cut 2nd pattern for shawl collar component consisting of upper collar, lapel and front facing (these 3 parts are called "upper collar"). Use master pattern created for interlining. Add 2 cm below peak, from there square out by 4 cm to the right add 1 cm from point 50 and 27 (see pattern) to the right. Join back neck parallel to 50-27, reshape upto the extension bottom. Cut "upper collar" from double layer of original cloth. (Fig 3) Stitch the shoulder dart on mark and trim out the excess material from dart width and press it towards neck.

First join in centre back components of interlining (a), then of upper collar (b), then of lower collar in garment (c). (Fig 4)

Note: Take care to match the centre of collar and centre of back.

Fig 3

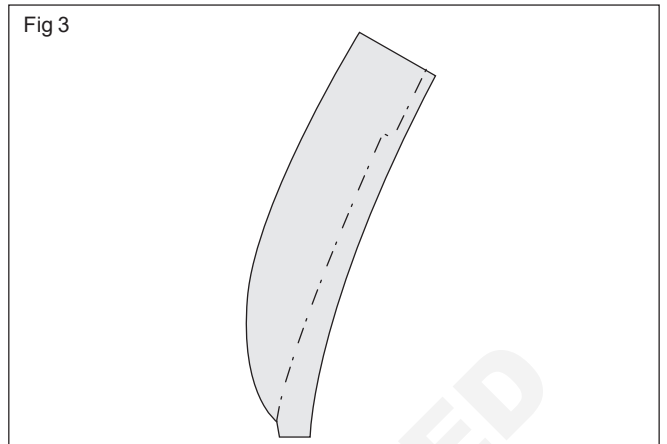
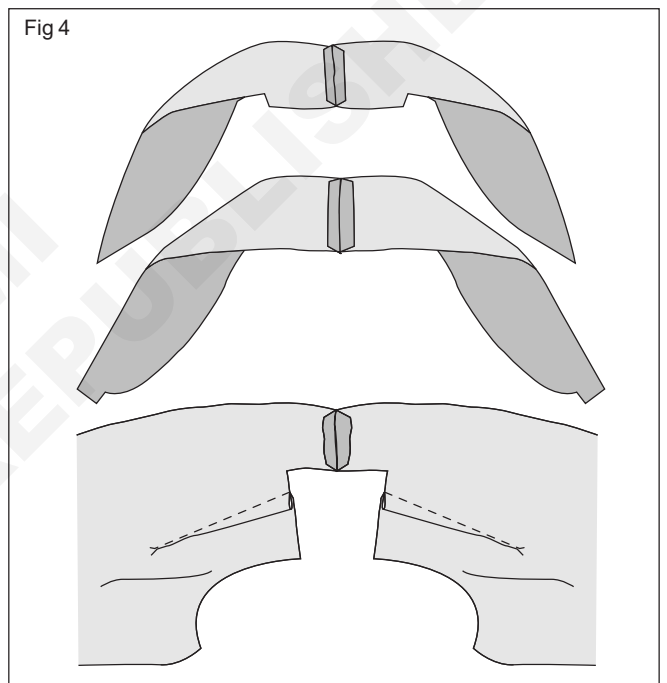
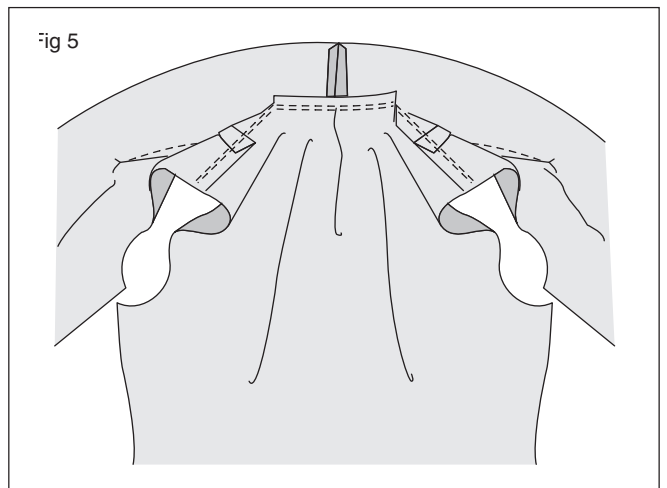


Fig 4



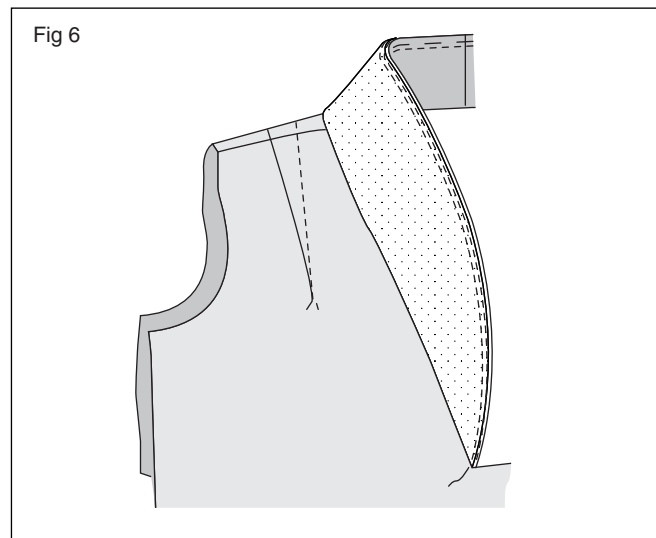
Now baste and stitch shoulder seam and back neck line in the garment. Clip the seam at neck point on both ends. Press shoulder seam to back side and neck seam towards under collar. (Fig 5)

Fig 5



Set the interlining on the garment wrong sides together and matching the shape and the seams in centre back.

Baste and stitch all around the collar 0.5cm from edge. (Fig 6)

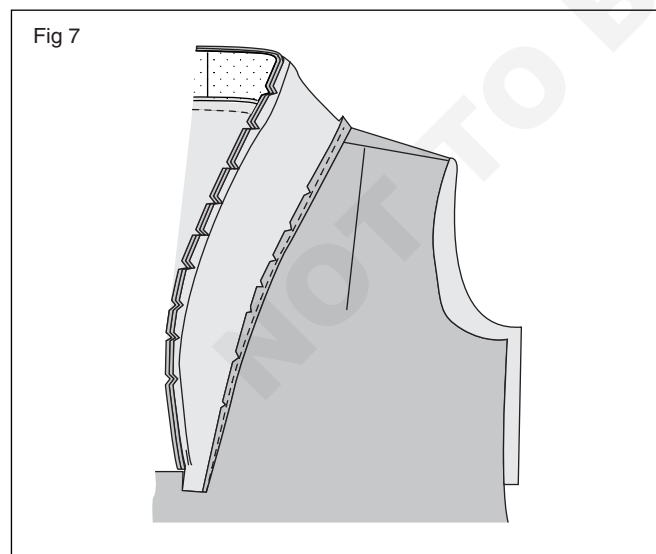


Note: Start stitching from centre back seam of collar first to the right, then from centre to the left; otherwise the shape of collar will be spoiled.

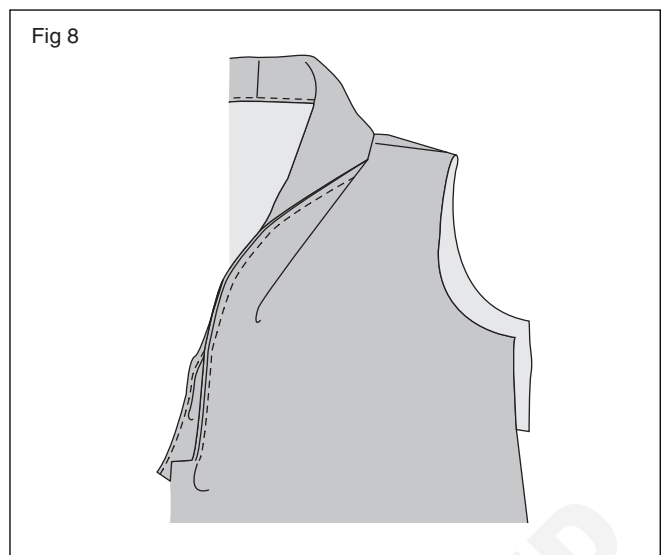
Turn raw edge of collar end by 1cm, baste it.

Take upper collar piece. Clip by 0.5 cm inner shape of upper collar diagonally at a distance of 3cm between the clips. Turn this clipped edge by 1cm to wrong side and stitch it.

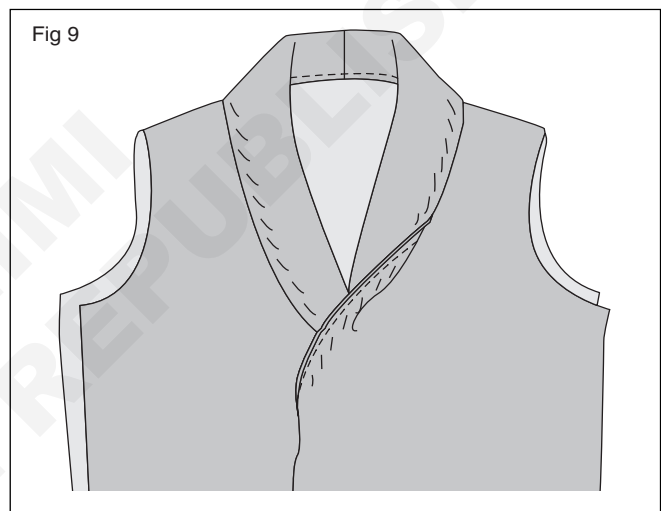
Place upper collar on the under collar right sides together and matching seams at centre back. Baste and stitch on outer shape through all the layers, starting from centre back seams to right and then to left side. Stop 1cm before each end lock the seam. Cut notches on round shape. (Fig 7)



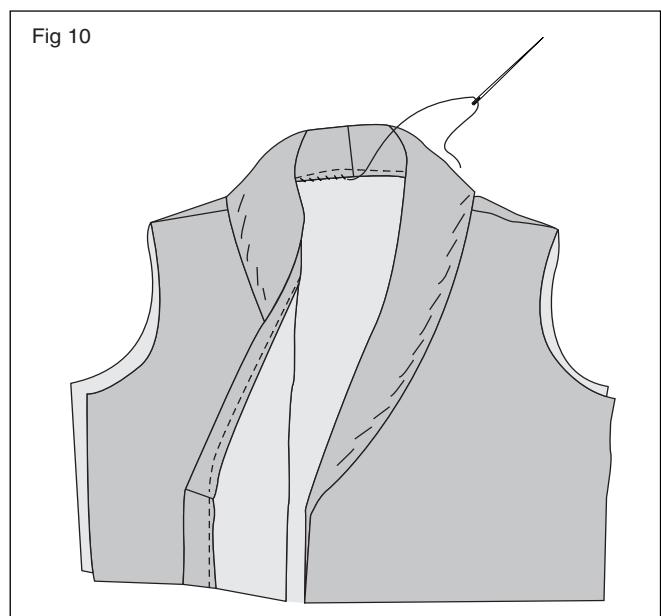
Press seam allowance to garment side. Turn the whole collar unit to right side, place under and upper collar flat. Set a seam on under collar from right side along the previous seam. Start and stop 2cm away from the end of both sides of collar. (Fig 8)



Set collar facing flat on garment facing, baste and fix with slip stitches. Place upper collar on under collar. Set seam on outer edge of collar towards inner collar and make diagonal basting to hold in place. (Fig 9)



Set inner edge of upper collar on back neck seam line matching centre. Baste and hem from sides towards centre. (Fig 10) Remove diagonal basting and press.

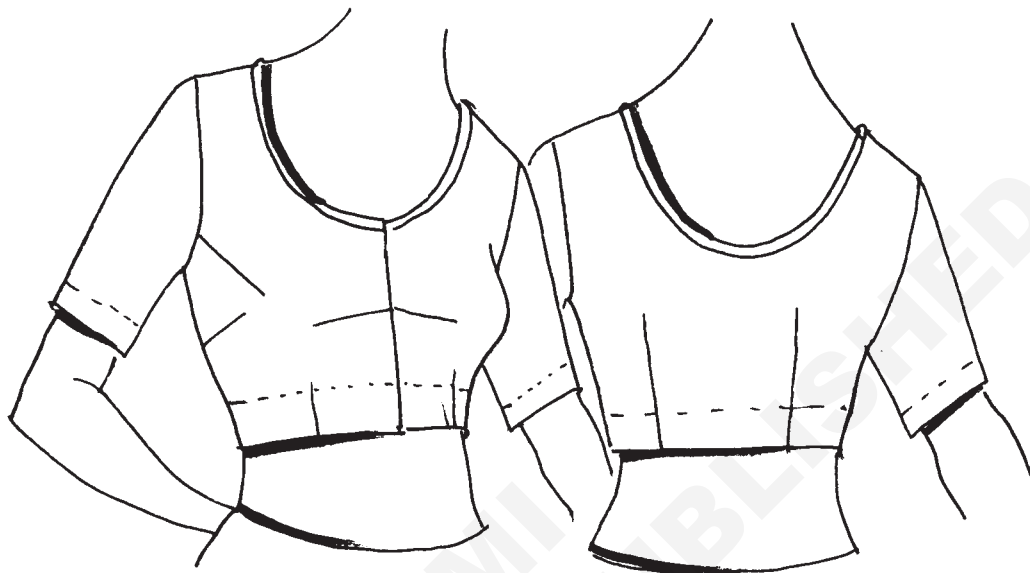


Construct a ladies' sari blouse - Style I

Objectives: At the end of this exercise you shall be able to

- draft and cut the paper pattern of blouse
- prepare master pattern
- lay and cut the required components of blouse
- sew the sari blouse.

Fig 1



AP1241E1

Measurements	Material
Front length = 38 cm Bust level = 25 cm Shoulder = 38 cm Bust = 92 cm Waist = 72 cm Sleeve length = 25 cm Sleeve bottom = 28 cm	0.95 x 0.90 m Rubia/Cambric 7 brown sheets

PROCEDURE

TASK 1 : Draft and cut the paper pattern of blouse

Paper pattern drafting

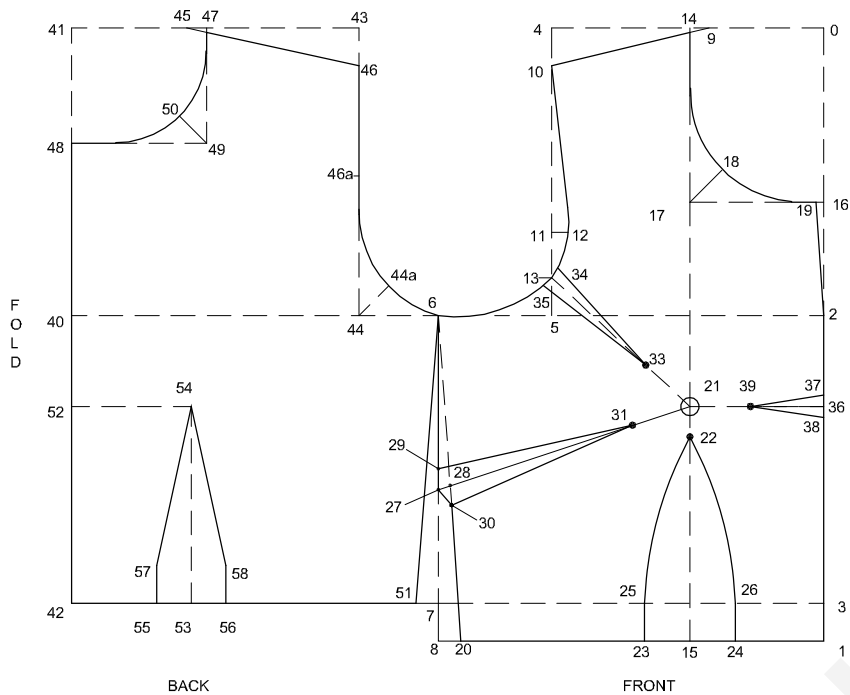
- 1 Lay the brown sheet widthwise folded on the drafting table, with its wrong side facing.
- 2 Draft the pattern of blouse front and back parts, following the instructions for drafting. Cut the balance brown sheet and fold it into equal halves.
- 3 Draft the pattern of sleeves matching the fold of brown sheet.

Bodice Front	→ 19 - 18 - 9 - 10 - 12 - 13 - 6 - 29 - 28 - 30 - 20 - 23 - 15 - 24 - 1 - 3 - 36 - 2 - 19
Bodice Back	→ 48 - 50 - 47 - 46 - 46a - 44a - 6 - 51 - 56 - 53 - 55 - 42 - 52 - 40 - 48
Sleeve	→ 0 - 14 - 13 - 12 - 4 - 7 - 5 - 1
(Front shape)	→ 0 - 20 - 21 - 16 - 4
Placket	→ 0 - 1 - 2 - 3 - 0

Pattern cutting

- 1 Cut the prepared paper pattern of blouse front, back, sleeve and placket along the following cutting lines, leaving enough space around them for preparing master pattern.
- 2 Cutting lines of blouse are

Fig 1

**Front**

0-1 = FL + 2.5 cm
 0-2 = B/4 - 4 cm
 1-3 = 2.5 cm
 0-4 = Sh/2 - 1 cm

2-6 = B/4 + 2.5 cm

0-9 = B/12
 4-10 = B/36
 5-11 = 1/3 of 5-10
 11-12 = 1 cm
 5-13 = B/36

0-14 = B/12 + 1.25 cm

0-16 = B/8

17-18 = 3 cm
 16-19 = 0.5 cm
 8-20 = 1.5 cm
 14-21 = BL
 21-22 = 2 cm
 15-23 = 15-24 =

$$\frac{\left(1 - 20 - \frac{W}{4}\right)}{2}$$

6-27 = B/8
 27-29 = 28-30 = 1.25 cm
 21-31 = 4 cm

21-33 = 4 cm

Square out horizontally and vertically from 0

Square out from 1,2,3
 Square down from 4 and mark 5

Square down from 6 and mark 7 and 8

Square out from 11

Join 10-12 and shape 12-13-6

Square down from 14 and mark 15

Square out from 16 and mark 17

Divide angle 14-17-16

Shape 14-18-16

Join 19-2

Join 6-20

Join 6-27, mark 28 and 29

Join 27-30

Join 31-29, extend up to 32

Join 31-30, 30-27

Join 13-21

13-34 = 13-35 = 0.75 cm Join 34-33, 35-33
 Square out from 21
 Mark 36

36-37 = 36-38 = 0.75 cm

21-39 = 4 cm

Join 39-37, 39-38

Back

6-40 = B/4 + 1.25 cm

40-41 = B/4 - 4 cm

41-42 = FL

41-43 = Sh/2

41-45 = B/12

43-46 = B/36

44-44a = 1/2 of 6-44

44-46a = 1/2 of 44-46

+ 1 cm

41-47 = B/12 + 2.25 cm

41-48 = B/12

49-50 = 2.5 cm

7-51 = 1.5 cm

41-52 = BL

42-53 = B/12 + 1.25 cm

53-55 = 53-56 =

$$\frac{\left(42 - 51 - \frac{W}{4}\right)}{2}$$

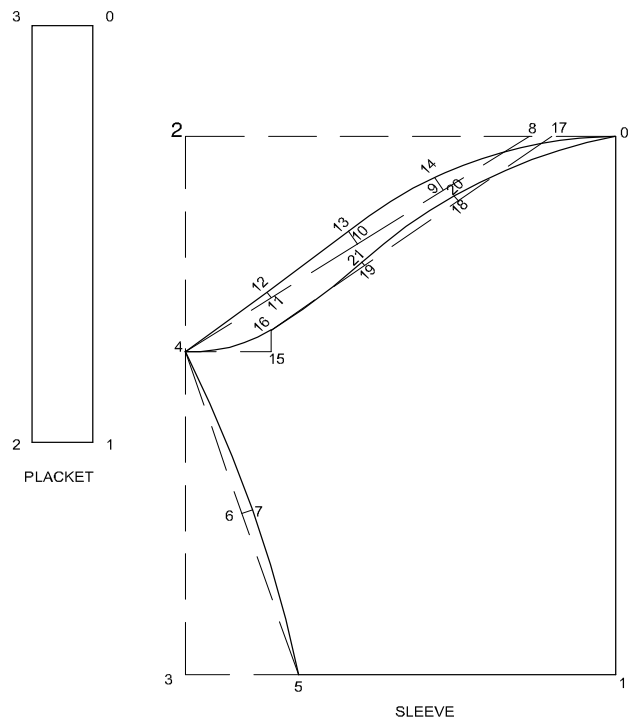
55-57 = 56-58 = 2.5 cm

Join 55-57-54

Join 54-58-56

Square up from 56 and 55

Fig 2

**Sleeve**

0-1 = SL
 0-2 = $B/4 - 4$ cm
 2-4 = $B/12 + 2.5$ cm
 1-5 = $SB/2$
 4-6 = $1/2$ of 4-5
 6-7 = 0.5 cm
 0-8 = $B/24$

11-12 = 0.3 cm
 10-13 = 9-14 = 0.7 cm

4-15 = $B/24$
 15-16 = 1 cm
 8-17 = 1 cm

18-20 = 0.3
 19-21 = 0.2 cm

Placket

0-1 = 16-1 of front
 1-2 = 4 cm

Square out horizontally and vertically from 0
 Square out from 1
 Square down from 2 and mark 3

Join 4-5

Shape 4-7-5
 Join 4-8 and divide into 4 equal parts, mark 9,10,11

Shape 0-14-13-12-4 (back shape)

Join 16-17
 Divide into 3 equal parts.
 Mark 18 and 19

Shape 0-20-21-16-4

Square out horizontally and vertically from 0
 Square out from 1
 Square up from 2 and mark 3

AP1240112

Instruction for Master Pattern**Front and back**

Front opening, shoulders and on armhole 0.75 cm
 Sides 2.5 cm
 Bottom 3 cm

Sleeves

Top 0.75 cm
 Side 2.5 cm
 Bottom 3 cm

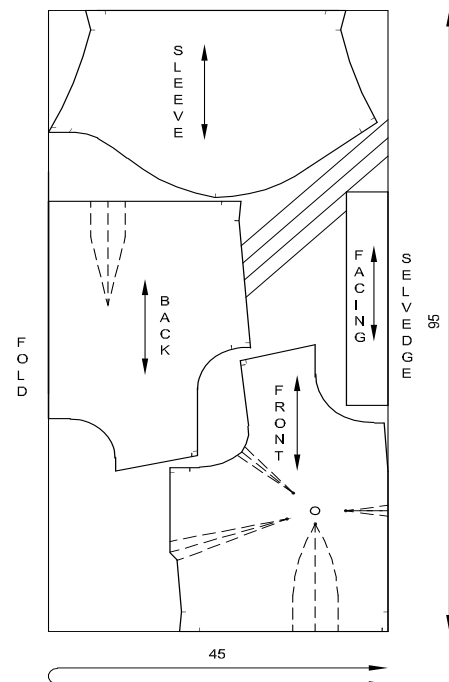
No seam allowance at neck

Facing

Sides 0.75 cm
 Bottom 3 cm

- 1 Take body measurements individually.
- 2 Draft blouse according to instructions for drafting.
- 3 Prepare master, pattern as per instructions and mark, notches on darts, truing and seam allowance.
- 4 Fold fabric on width. Layout pattern on wrong side and mark.
- 5 Cut the components and transfer marks on the lower layer of fabric with tracing wheel.
- 6 Stitch darts of front and back side on marks.
- 7 Press open front waist darts, press side dart, scye dart and centre darts downwards. Press the back darts towards centre line.
- 8 Prepare front placket.
- 9 Join front and back shoulder together with double stitched seam.
- 10 Trim raw edges of placket at neck and finish neck with bias binding.
- 11 Overlap the placket and baste.
- 12 Stitch front and back sides. Trim raw edges of seam allowance with pinking scissors. Place it flat towards back side and press.

Fig 3

**CUT COMPONENTS**

FRONT 2
 BACK 1
 SLEEVES 2
 FACING 2

BIAS STRIPS FOR ROUND NECK

AP1240113

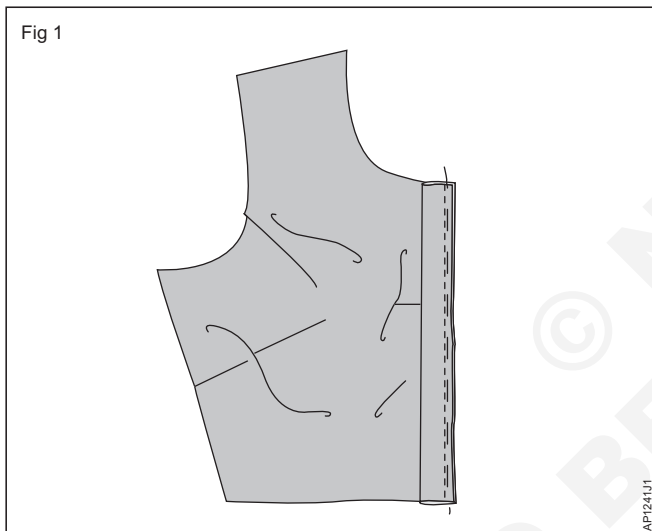
- 13 Remove the basting of lapped placket.
- 14 Hem the bottom.
- 15 Stitch sides of sleeves, trim the seam allowance with pinking scissors and press.
- 16 Mark pitch point (centre of arm hole girth) which will appear on front.
- 17 Place the seam of sleeves along with the pitch point and match shoulder seam and centre of sleeve crown. Pin and baste sleeve with arm-hole with set-in-sleeve method and stitch. Set another row of stitches close to the seam allowance.

- 18 Mark positions and tack blouse hooks on inner side of right side placket.
- 19 Make thread eye for hooks on matching positions on outer side of other placket.
- 20 Finish and press.

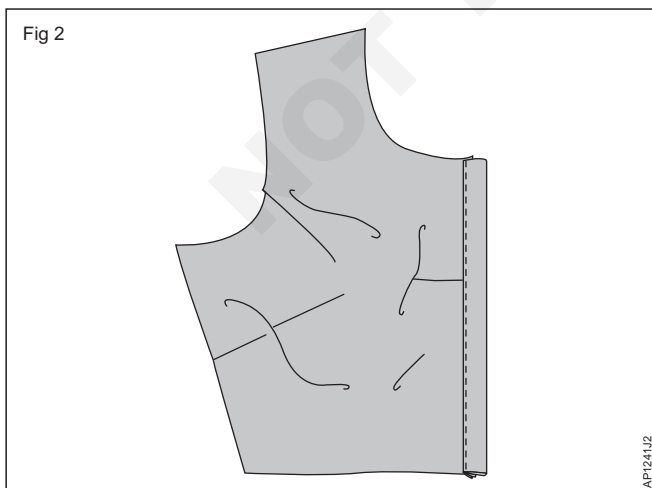
Blouse placket

Objective: This shall help you to
 • prepare the placket for blouse.

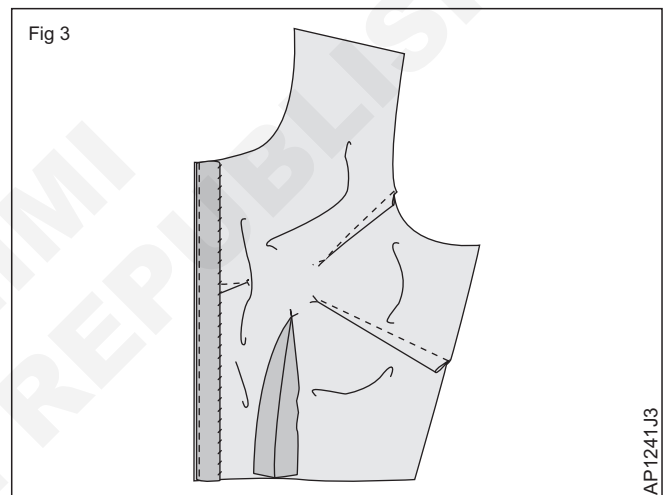
Take placket and front pieces. Take one piece of placket and fold it lengthwise wrong sides together. Place the raw edge of folded strip along the center edge of right front piece on right side, pin and baste, stitch on seam line (Fig 1).



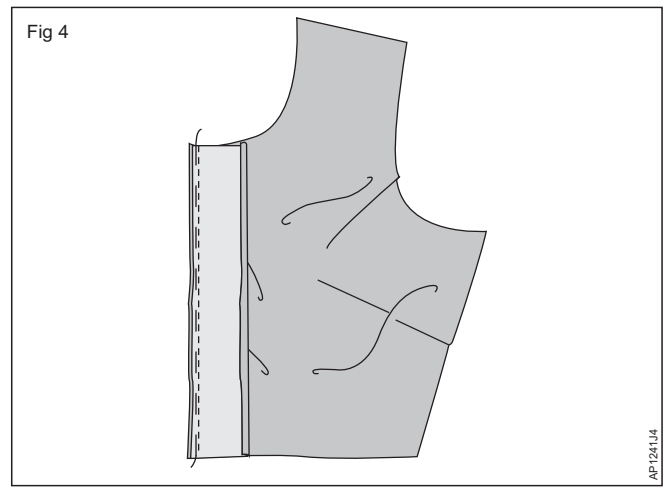
Turn the placket piece flat by 180° and make edge stitch on the placket piece along the previous seam. (Fig 2)



Turn the placket piece inside the front piece, press and baste. Finish the placket with hemming stitch. (Fig 3)

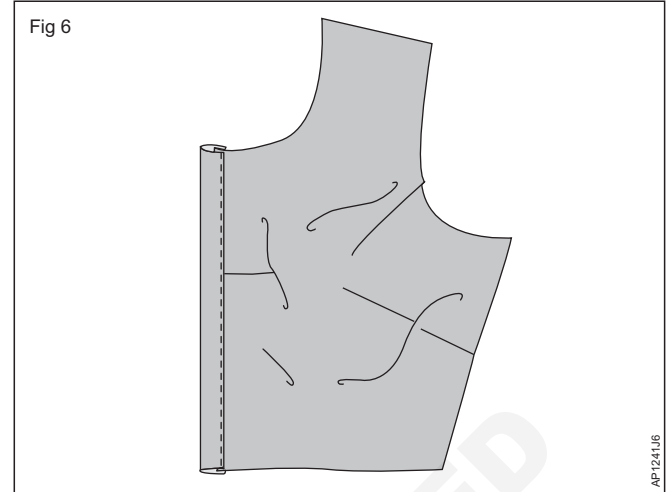
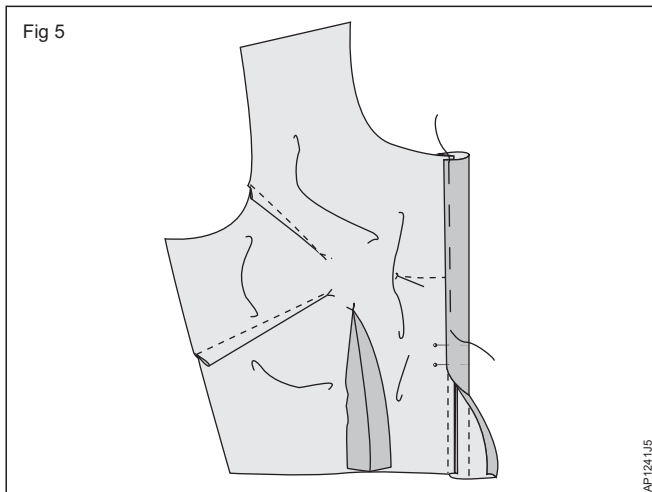


Place the other placket piece matching right sides of placket and left front along the center front line, pin and baste, stitch on the marked seam line. Turn the other raw edge of placket piece by 0.75 cm on its wrong side and press. (Fig 4)



Turn again the placket piece over the previous seam on wrong side covering it by 2 mm, pin and baste. (Fig 5)

Stitch from right side in the crevice of previous seam. (Fig 6) Remove basting and press.



Choli-cut blouse

Objectives: At the end of this exercise you shall be able to

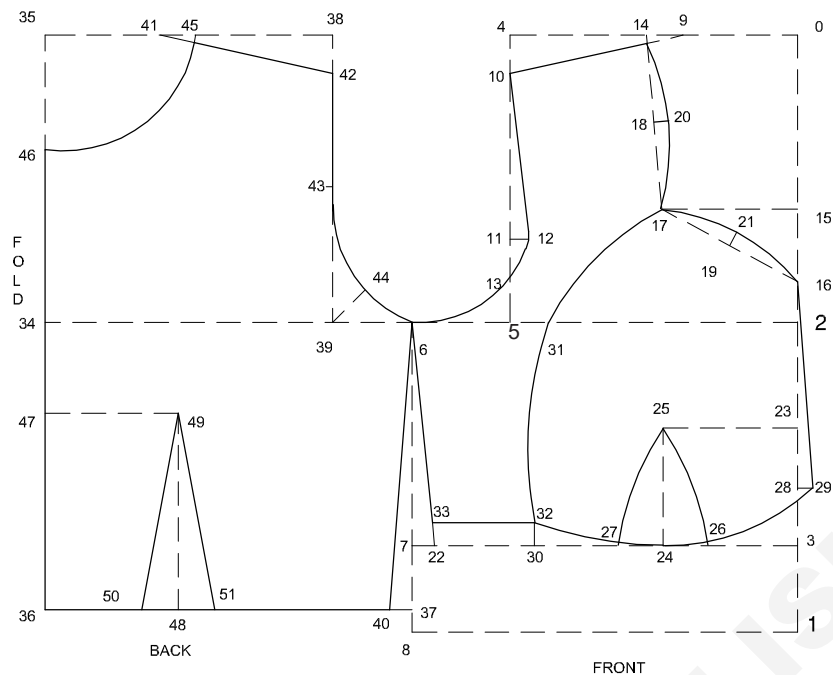
- draft and stitch a choli-cut blouse
- attach choli pieces with side pieces
- fix the belt in blouse.



Measurements

Full length = 38 cm
 Bust level = 25 cm
 Shoulder = 38 cm
 Bust = 92 cm
 Waist = 72 cm
 Sleeve length = 25 cm
 Sleeve bottom = 28 cm

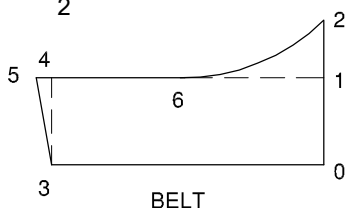
Fig 2

**Front**

0-1 = FL + 1.5 cm
 0-2 = B/4 - 4 cm
 1-3 = B/16
 0-4 = Sh/2
 2-6 = B/4 + 2.5 cm

0-9 = B/12
 4-10 = B/36
 5-11 = 1/3 of 5-10
 11-12 = 1.25 cm
 5-13 = B/36
 0-14 = B/12 + 2.5 cm
 0-15 = B/8
 0-16 = B/6 + 1 cm
 15-17 = B/12 + 1.5 cm
 14-18 = 1/2 of 14-17
 17-19 = 1/2 of 17-16
 18-20 = 19-21 = 1 cm
 7-22 = 1.5 cm
 0-23 = BL + 1 cm
 3-24 = 23-25 = B/12
 + 1.25 cm
 24-26 = 24-27

$$= \frac{\left(3 - 22 - \frac{W}{4}\right)}{2}$$



BELT

Square out horizontally and vertically from 0

Square out from 1,2,3
 Square down from 4, mark 5
 Square down from 6, mark 7 and 8

Join 9-10

Shape 10-12-13-6

Square out horizontally

Join 14-17-16

Shape 14-20-17-21-16 (neck)
 Join 6-22

Join 24-25 and 23-25

Shape slightly 25-26, 25-27

48-50 = 48-51

Belt

0-1 = B/16
 1-2 = B/24
 0-3 = W/4
 4-5 = 1 cm
 1-6 = 1/2 of 1-5

3-28 = B/24

28-29 = 1 cm

22-30 = B/12 - 1 cm

5-31 = 2.5 cm

30-32 = 22-33 = 1.5 cm

Back

6-34 = B/4 + 1.25 cm

34-35 = B/4 - 4 cm

35-36 = FL

36-37 = 34-6

35-38 = Sh/2

37-40 = 1.5 cm

35-41 = B/12

38-42 = B/36

39-43 = 1/2 of 39-42

+ 1 cm

39-44 = 1/2 of 39-6

35-45 = B/12 + 2.5 cm

35-47 = BL

36-48 = 47-49 =

B/12 + 1.25

Join 16-29

Shape 17-31-32

Join 32-33

Shape 29-24-32

Square up and down from 34

34-35 = B/4 - 4 cm

35-36 = FL

36-37 = 34-6

35-38 = Sh/2

37-40 = 1.5 cm

35-41 = B/12

38-42 = B/36

39-43 = 1/2 of 39-42

+ 1 cm

39-44 = 1/2 of 39-6

35-45 = B/12 + 2.5 cm

35-47 = BL

36-48 = 47-49 =

B/12 + 1.25

Square up and down from 34

34-35 = B/4 - 4 cm

35-36 = FL

36-37 = 34-6

35-38 = Sh/2

37-40 = 1.5 cm

35-41 = B/12

38-42 = B/36

39-43 = 1/2 of 39-42

+ 1 cm

39-44 = 1/2 of 39-6

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B/12 + 1.25

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34-35 = B/4 - 4 cm

35-36 = FL

36-37 = 34-6

35-38 = Sh/2

37-40 = 1.5 cm

35-41 = B/12

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+ 1 cm

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+ 1 cm

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Square up and down from 34

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+ 1 cm

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35-36 = FL

36-37 = 34-6

35-38 = Sh/2

37-40 = 1.5 cm

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+ 1 cm

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+ 1 cm

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Square up and down from 34

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35-38 = Sh/2

37-40 = 1.5 cm

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38-42 = B/36

39-43 = 1/2 of 39-42

+ 1 cm

39-44 = 1/2 of 39-6

35-45 = B/12 + 2.5 cm

35-47 = BL

36-48 = 47-49 =

B/12 + 1.25

Square up and down from 34

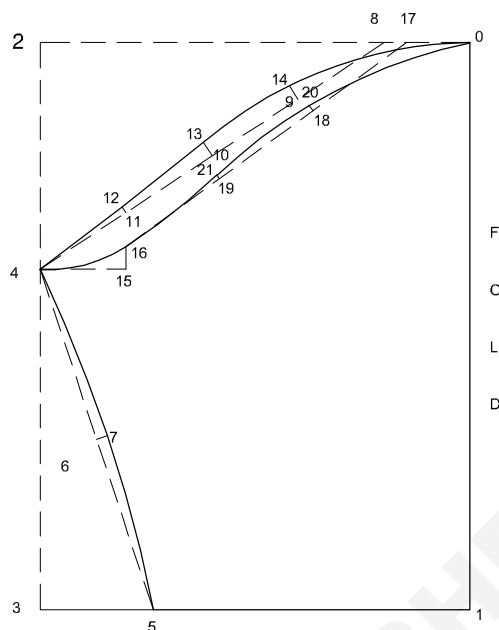
34-35 = B/4 - 4 cm

35-36 = FL

36-37 = 34-6

35-38 = Sh/2

37-40 = 1.5 cm



Placket facings

Square out horizontally and vertically from 0

0-1 = 2-3 = FL - depth of neck + 2 cm
0-2 = 1-3 = 4 cm

Instruction for Master Pattern

Front

Neck and armhole	0.75 cm
Shoulder	1 cm
Side	2.5 cm
Bottom	1 cm

Choli

Neck, centre and on curved	
Shape	0.75 cm
Bottom	1 cm

Belt

Top and centre front	0.75 cm
Side	2.5 cm
Bottom	3 cm

Back

Neck and armhole	0.75 cm
Shoulder	1 cm
Side	2.5 cm
Bottom	3 cm

Sleeves

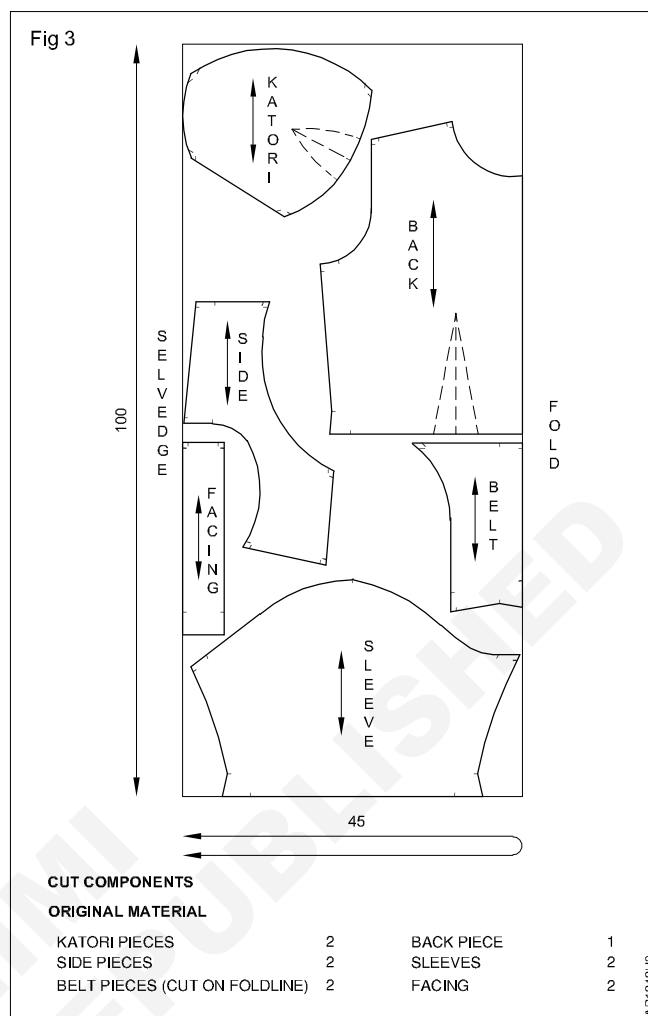
Sleeve top	0.75 cm
Side	2.5 cm
Bottom	3 cm

Facing

Bottom	3 cm
All other sides	0.75 cm

For more stability the belt can be finished with a double layer of fabric. In that case the layout/ quantity of material has to change so that 4 belt pieces can be cut from the material.

- 1 Draft the pattern of choli-cut blouse according to the instructions for drafting.
- 2 Prepare master pattern according to the instructions and mark seam allowances. Inlay and turnig. Cut the pattern.
- 3 Cut notches on point 31 on side and choli piece.
- 4 Layout the pieces on the fabric.
- 5 Cut the fabric.
- 6 Prepare and press the darts on back and front.
- 7 Attach choli piece to the side piece at curved side and fix belt on front side. (SS.No.1)
- 8 Prepare front placket (Ref. Ex.38)
- 9 Cut facing for front neck from remaining material. Attach to front neck as described in Ex.37.
- 10 Attach back strips to back neck.
- 11 Finish back neck with binding.
- 12 Overlap the placket and baste it. Join front and back shoulder.
- 13 Finish side seams.
- 14 Trim inlays with pinking scissors.
- 15 Remove basting from placket. Baste and hem at bottom.
- 16 Prepare sleeve and attach with set-in-sleeve method to blouse.
- 17 Fix hooks and eye on placket.
- 18 Finish and press.

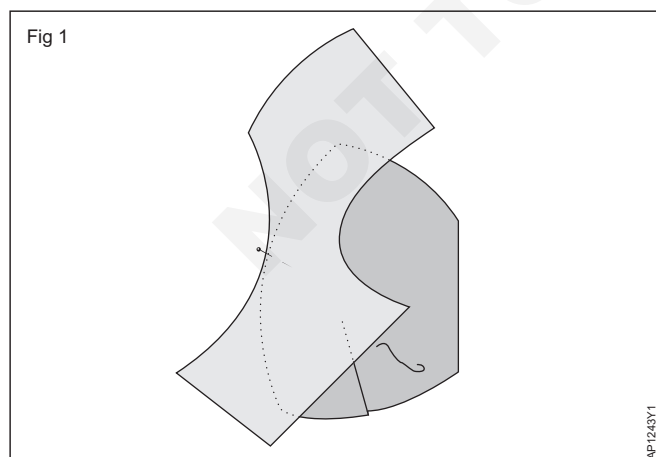


Attaching Katori piece

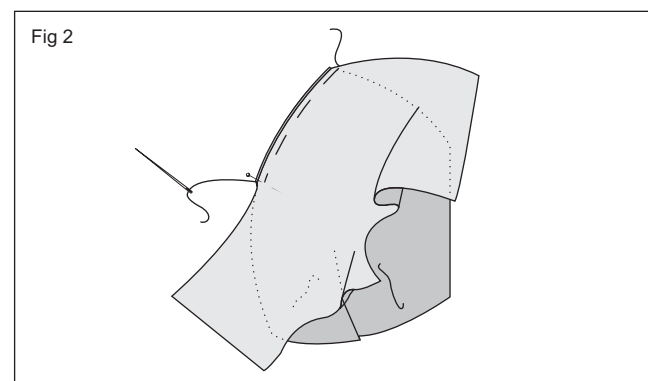
Objective: This shall help you to

- join side and Katori piece.

Take choli piece and side piece and place the side piece over the choli piece with right sides together. Match balance marks and pin. (Fig 1)



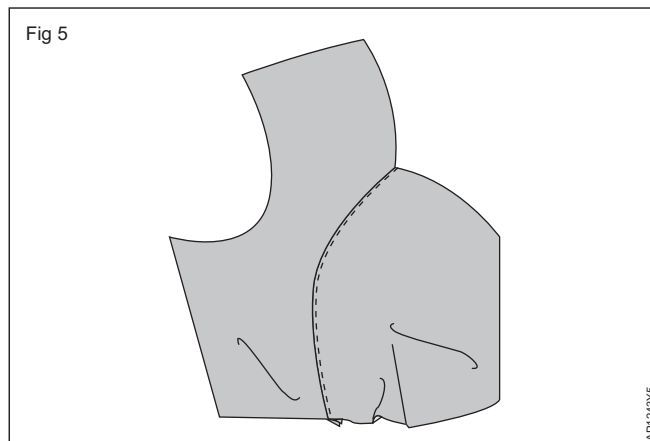
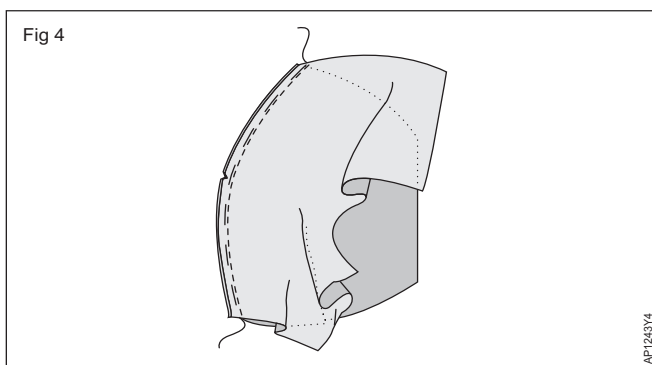
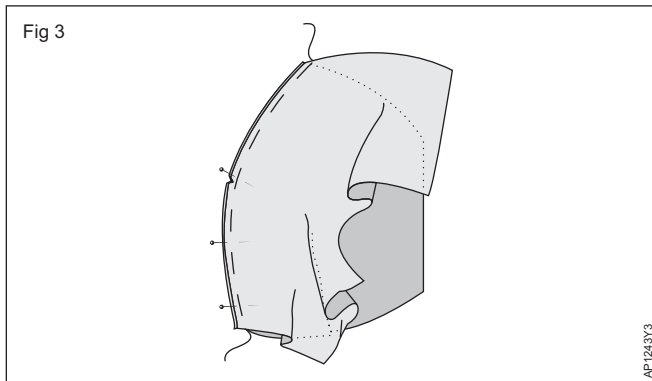
Match on the neck lines joining point of both pieces and pin. Baste on the seam line up to the balance mark. Remove two top pins leaving the pin on balance mark. (Fig 2)



Match the bottom end of choli piece and side piece and pin. Put another pin in the middle between the two pins and baste up to the lower end. (Fig 3)

Remove the pins and stitch on the seam line. (Fig 4)

Place side piece flat and press gently; press seam allowance towards choli piece. Make top stitch on the edge of choli piece. (Fig 5)

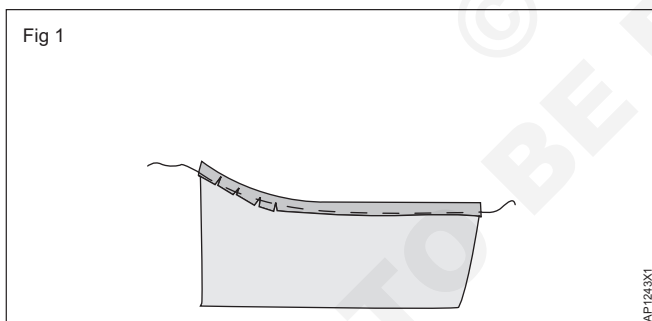


Attaching belt

Objective: This shall help you to
 • **fix belt in the choli-cut blouse.**

Take front piece and belt piece.

Turn upper raw edge of belt by 0.75 cm towards wrong side and baste. (Fig 1)

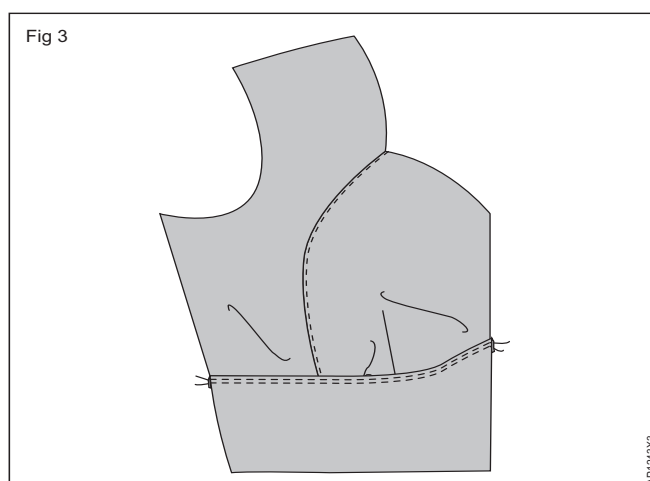
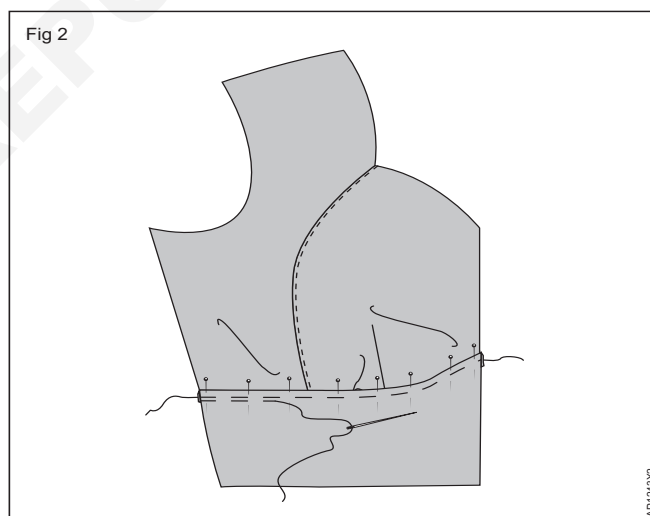


Turn the belt piece to right side, set the belt on the bottom of the front piece leaving 1 cm seam allowance. Match centre edge and inlays at the side of front and belt piece. Pin and baste. (Fig 2)

Remove the pin. Stitch on the top edge of belt.

Stitch parallel to the previous seam line at a distance of 3 mm. (Fig 3)

Press it.

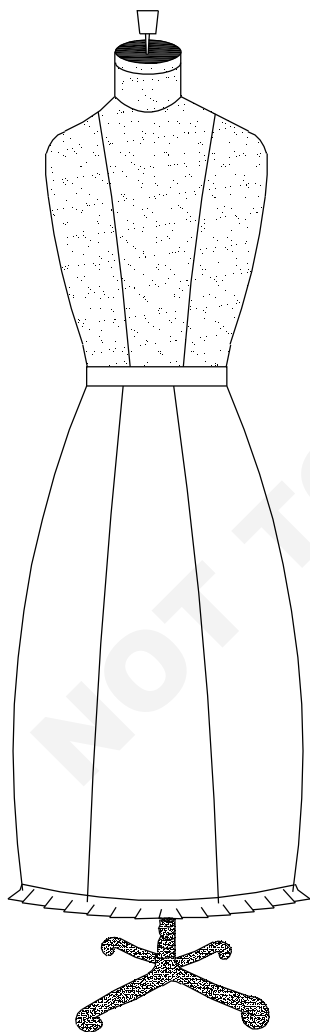


TASK 1: Check the fitting of a garment

- 1 Put on the Blouse and Petticoat right side out over a correct size dummy.
- 2 Match the Centre Front line of the Blouse and Dummy. Adjust the blouse, so that the centerlines coincide with the centre of the dummy.
- 3 Check whether the armhole, neckline and lower edge of the blouse fix on the dummy properly. Otherwise adjust the blouse for correct fixing.
- 4 Check the waist line of the petticoat is matching with the waistline of the dummy.
- 5 Adjust the petticoat so that the waist line coincides with the waistline and side seams coincide with the sides of the dummy.
- 6 Study the overall appearance of the Blouse and petticoat.(Fig.1)
- 7 Check whether there are any changes needed in the length of the blouse, sleeve and shoulder seam.
- 8 Check whether the blouse has the right amount of ease across bust, upper arm, back etc.
- 9 Check the seamlines of Shoulder, armscye, side seam, waistline and neckline follow the general silhouette of the body of the dummy.
- 10 Check whether the darts are of optimum width and point towards the bust point ending $\frac{3}{4}$ " to 1" away from the bust point.
- 11 Check whether there are any changes needed in length and bottom circumference of the petticoat.
- 12 Check whether it has the right amount of ease across the hip. (Fig 2)
- 13 Check whether the seam lines follow the general silhouette of the dummy.
- 14 Check whether the grain lines of both the upper and lower garment are falling correctly in the proper places of the dummy.
- 15 Check whether there are any wrinkles in both the upper and lower garment.
- 16 Note the changes in a paper if necessary.

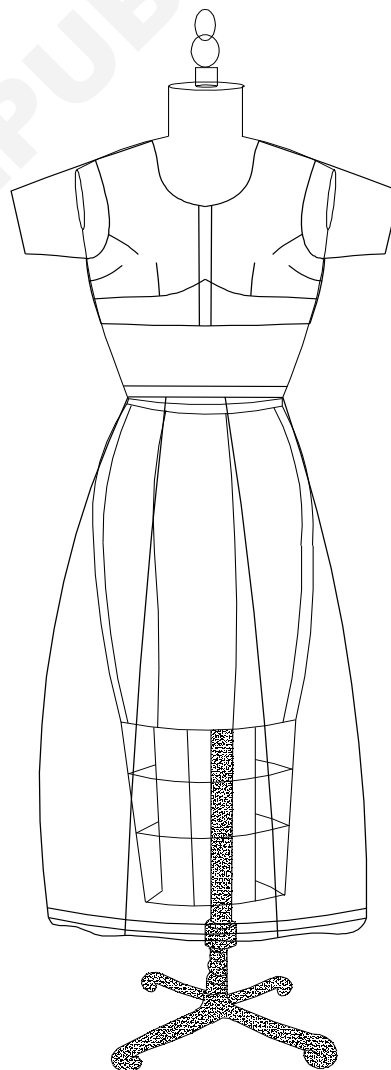
Get the work checked by your Instructor.

Fig 1



DRN2344.11

Fig 1



DRN2344X1

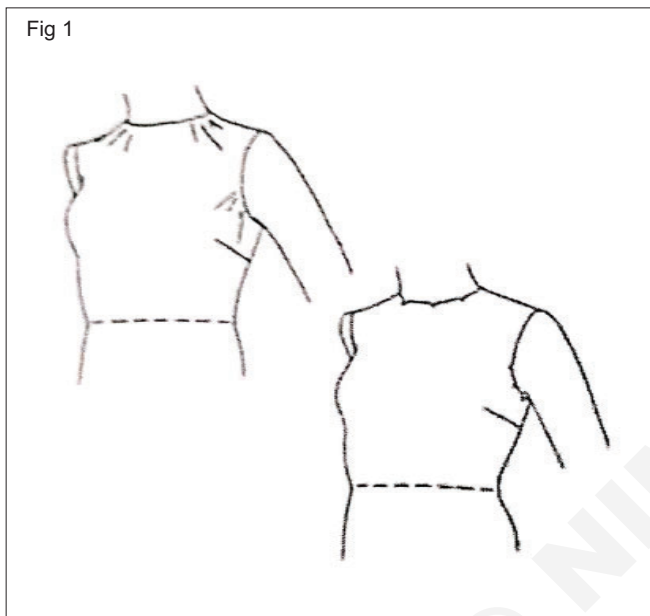
Alteration of garment as per requirement of individual record

Objectives: At the end of this exercise you shall be able to

- **check for a change in garment**

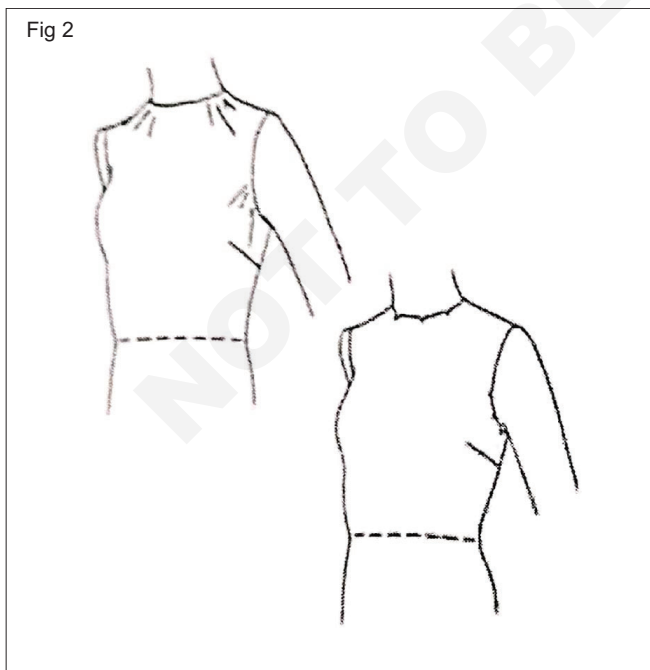
- 1 Problem folds below the bust dart:** Solution. Undo the dart and part of the side seam. Lift shoulder a little, re-pin a bigger dart and pin the side seam to take out the excess fabric. (Fig 1)

Fig 1



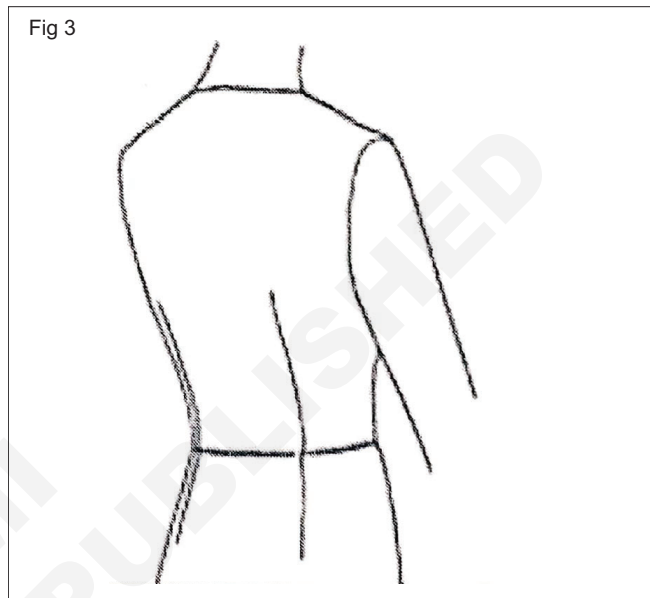
- 2 Problem - Low waist:** Solution – Tie a band the waist and remark the waistline. Remove and re-pin the skirt to new waistline. (Fig 2)

Fig 2



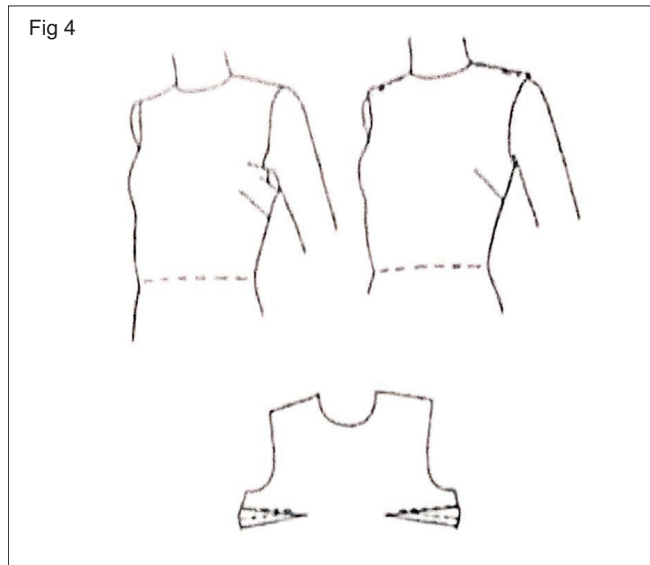
- 3 Problem – baggy below the hip:** Solution – Raise the skirt at back only and re-pin. (Fig 3)

Fig 3



- 4 Problem – Gaping armhole:** Solution – Undo dart and pin a bigger dart. Making sure that it point towards the bust point. One may need to lift shoulder seam at the armhole. (Fig 4)

Fig 4



- 5 Problem – Low neckline gapes:** Solution – lift at the front shoulder seam. Lower the dart point if necessary. (Fig 5)

- 6 problem – Folds in the dress below the waist:** Solution – Undo the side seam from below the armhole and ease out until the garment hangs smoothly. (Fig 6)

Fig 5

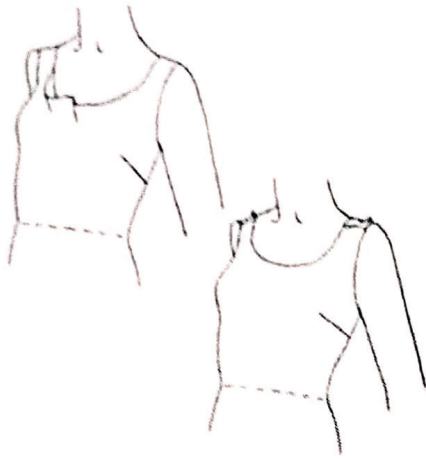
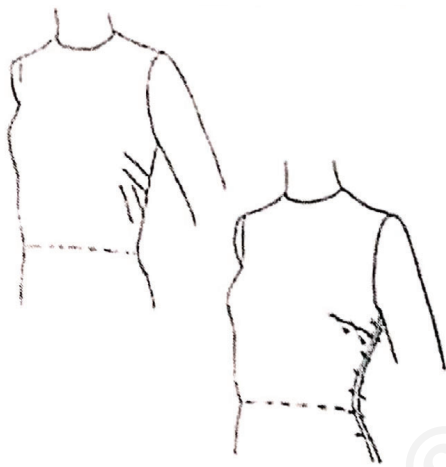
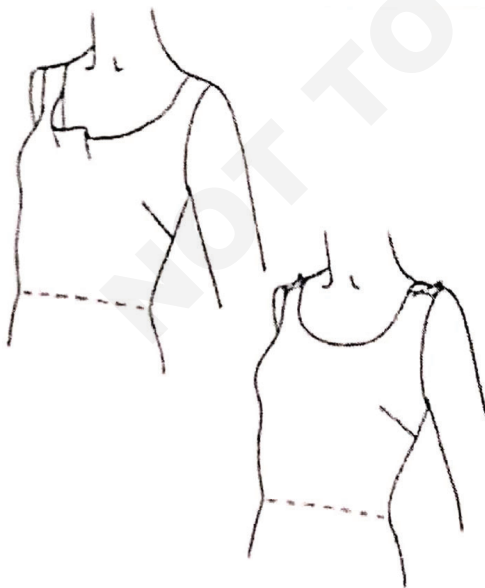


Fig 6



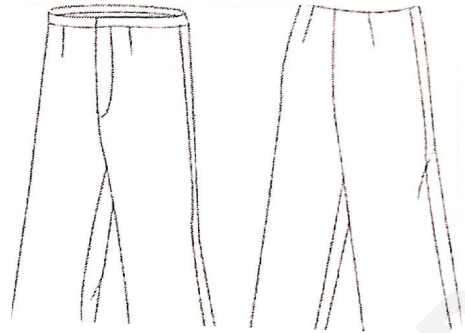
- 7 Problem – Tight neck or armhole:** Solution – slash and snip seam allowance to release tension. If it is not enough, mark a new seam line that is lower than before. (Fig 7)

Fig 7



- 8 Problem – Trousers are loose at waist, hip or leg. Crease on leg and trousers stands away at waist:** Solution – Take excess fabric at side and pin at original seam lower down. For larger hip increase the dart intake. Pin the excess towards the outer seam. (Fig 8)

Fig 8



- 9 Problem – Trousers tight below the waist, crease around abdomen:** Solution – Release darts and reduce their width and length, also release some ease on the outer seams re-p” (Fig 9)

Fig 13

Fig 9



Neckline

- The front of the normal neck line should be always larger than the neckline at the back
- Neckline should not be too larger or too small.

Collar

- The circumference of the collar should be at least $\frac{1}{4}$ th of an inch bigger than that of the neckline.
- You should be able to slip a finger in between your neck and the shirt at any point without struggling or forcing.
- The collar should neither be too tight nor too loose. (Fig 10)

Fig 10

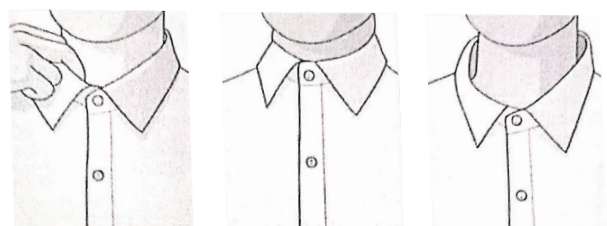
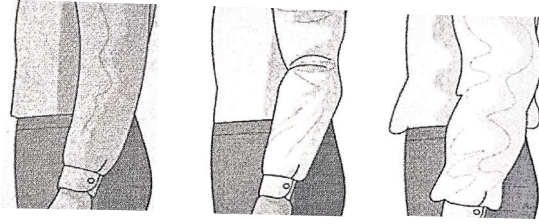


Fig 11



Sleeves

- The crosswise grain at the bicep should lie parallel to the floor.
- The sleeve should not be too fitted and should hang comfortably.

- The sleeve should begin from the edge of the shoulder seam. If it is too high the sleeve would pull.

Waistline

- The waistline should not be too fitted to too loose as both can cause discomfort.
- The narrowest part of the garment should fall at the wearer's waist.

Hips

- Garments should have enough room around the hip area.
- Garment should not have excess ease in hip or thigh area as it will result in vertical folds.

Pattern making using adaptation, fabric

Objectives: At the end of this exercise you shall be able to

- prepare the muslin cloth for draping in basic bodice
- prepare the muslin for dart variation.

Requirements			
Materials			
• Tailor chalk	- 1 No.	• Paper pins	- 1 No.
• Measuring tape	- 1 No.	• Tracing paper	- 1 No.
• Scissors	- 1 No.	• Dress form	- 1 No.
• Pencil HB	- 1 No.	• Iron box	- 1 No.
• Quilters ruler	- 1 No.	• Ironing table	- 1 No.
		• Muslin cloth	- 1 No.
		• Tracing wheel	

PROCEDURE

TASK 1: Principles of pattern making using adaptation, fabric

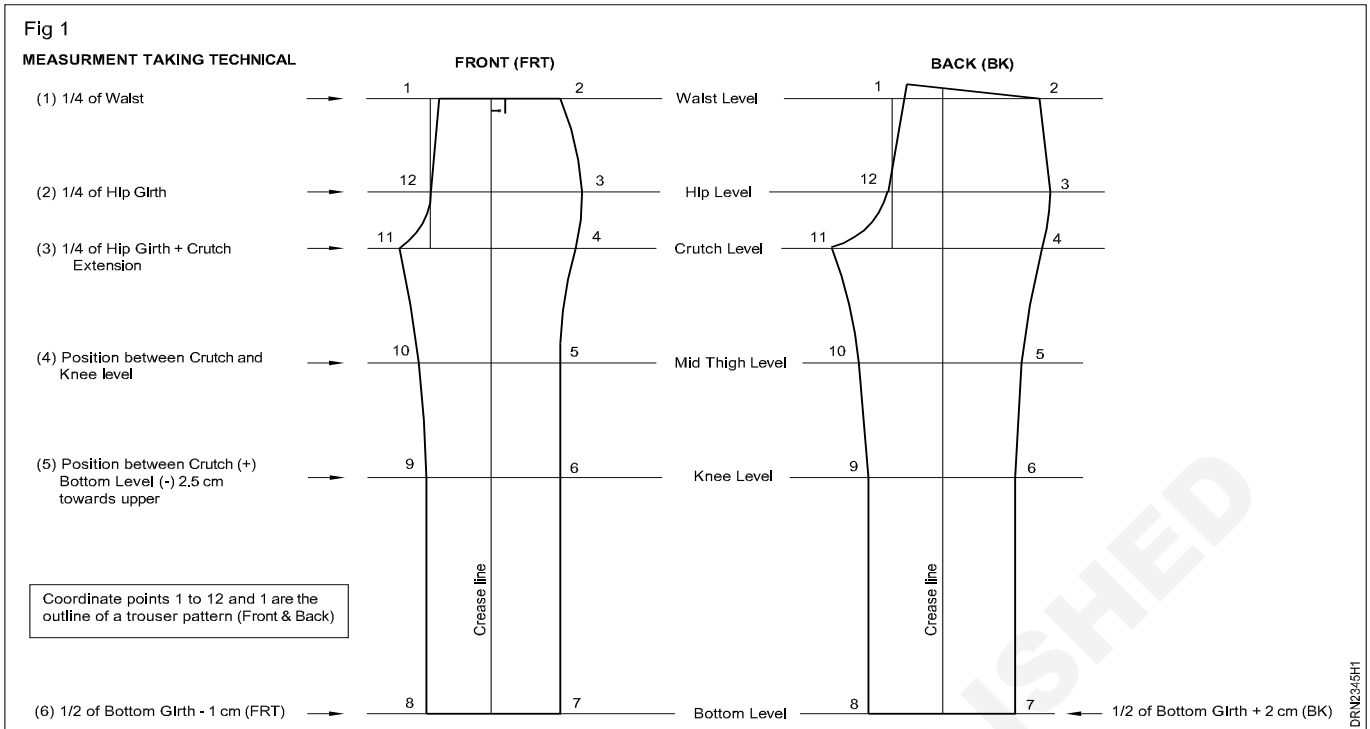
- 1 A far as possible make changes within the pattern by slashing and spreading or slashing and lapping. Patterns can also be altered by redrawing the edges of the pattern. (This is the method adopted for altering garments at the time of fitting.) But the first method is by far the best in altering paper patterns.
- 2 To preserve the original grain line, make all slashes and folds parallel or perpendicular to the grain line (to center front line, center back line etc.).
- 3 Where there are darts, make changes between the tip of the dart and the outside edge.
- 4 If an alteration in length is made along one edge of the pattern, take care to make an identical alteration in the adjoining edge. For example, if back shoulder seam is shortened the front shoulder seam should also be shortened.
- 5 When tucks or darts are used for making a pattern smaller, remember that the width of these should be just half the amount to be removed.
- 6 When decreasing or increasing the width of pattern pieces, if only half the pattern (half back or half front) is used, subtract or add only one fourth of the total adjustment to be made. For example, if waist measurement has to be increased by one inch, add $\frac{1}{4}$ " to the half back pattern and the same amount to the front pattern. If only a front or back section needs adjustment, add or minus half the amount of the adjustment to the respective section.
- 7 When the pattern alteration involves slashing and spreading, it is necessary to keep a sheet of paper beneath and to pin or stick to it the spread-out parts so that they will thereafter remain in position. On spreading or lapping after slashing, some edges of the pattern become jagged. These must be trimmed after drawing the new seam lines.

How to Check the Altered Fit?

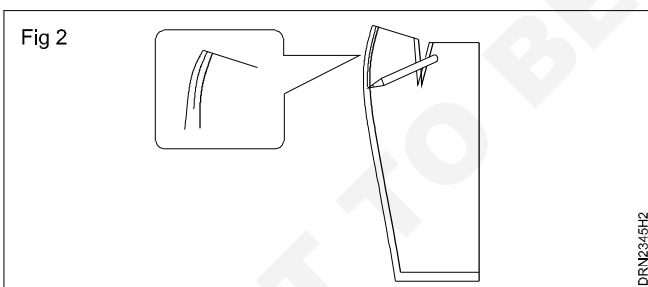
Before cut the fashion fabric check the pattern fit, only the basic parts of the garment together.

- Take a helping person who helps you to check the fit of the garment. Otherwise you stand in front of a full-length mirror.
 - Use the following checklist that helps you, if further alterations or minor fitting is needed for a good fit.
- 1 Adequate wearing ease is available for sitting, moving and bending.
 - 2 Armhole seams curve smoothly over the end of shoulder.
 - 3 Crosswise grain lines are parallel to floor.
 - 4 Crotch depth is right, neither too low and baggy nor too tight and binding.
 - 5 Darts point to the fullest part of the curve.
 - 6 Hemline is even.
 - 7 Hipline fits smoothly.
 - 8 Lengthwise grain lines, side seams, center front and center back seams hang straight or at right angles to the floor.
 - 9 Pant legs hang smoothly and do not restrict any part of the legs.
 - 10 Pants hang smoothly from the waist. The waistband fits the body comfortably and stays in place when bending and sitting.
 - 11 Pants have no pulls or excess fabric across the front or back crotch level.
 - 12 Shoulder seam length comes to end of shoulders.
 - 13 Sleeves are comfortable with no wrinkles.
 - 14 The length of the garment is becoming.

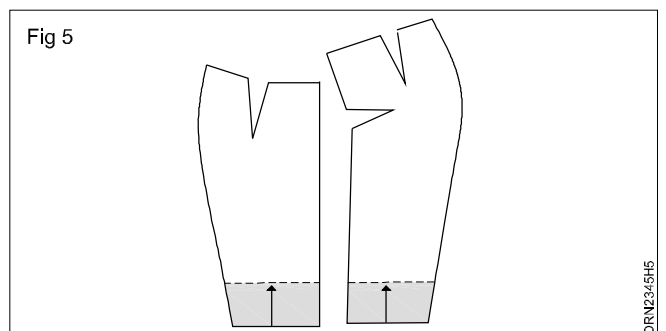
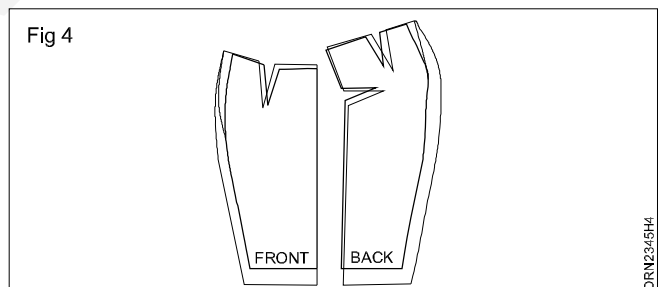
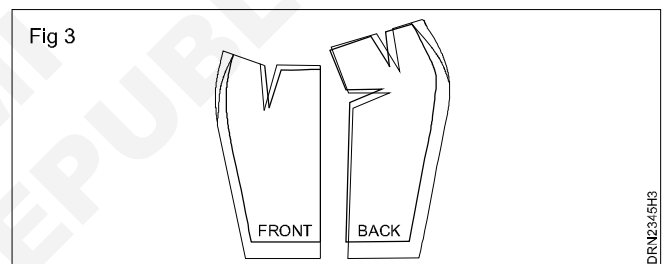
Pattern making using adaption fabric (Fig 1)



- Because it is difficult to have too many sizes on one pattern, we have chosen to have only 5 (men) or 6 (women) sizes per pattern. This means that we have had to skip every second size.
- If you require an in-between size then simply draw a new pattern between the lines of the existing pattern, following the same lines and contours, of the smaller and larger size.
- This works for all patterns, both men's and women's. (Fig 2)

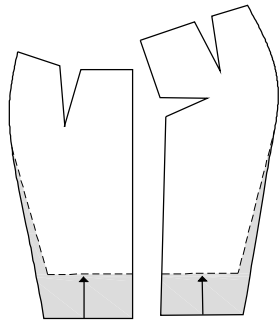


- For one size waist and larger size hip, draw the contoured line connecting the points of the smaller size waist to the larger size hip.
- Do this on both front and back pieces.
- For one size smaller hips, and a larger size waist, draw a contoured line connecting the points of the larger size waist to the smaller size hips.
- Do this on both front and back pieces. (Fig 3 & 4)
- To make a skirt shorter, measure how much you want to take off and mark it out on both front and back pieces.
- Keep note to leave enough for seam allowance otherwise your skirt may become too short. (Fig 5)



- To make a skirt longer you will also need to widen it a little from the hip line as well as lengthen it.
- You may also have to add splits in the side seam/s or back seam. (Fig 6)

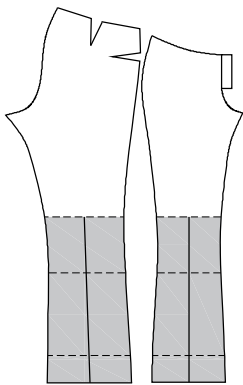
Fig 6



DRN2345H6

- To make pants shorter, measure how short you want them to be.
- To add seam allowance so your pants do not get too short.
- Mark out the measurements on both front and back piece.
- You can also make 3/4 length pants and shorts from this pattern. (Fig 7)

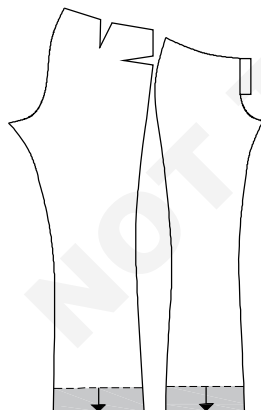
Fig 7



DRN2345H7

- To make the pants longer, measure the length required and adds it to the bottom.
- To add seam allowance and continue the line of the pants. (Fig 8)

Fig 8



DRN2345H8

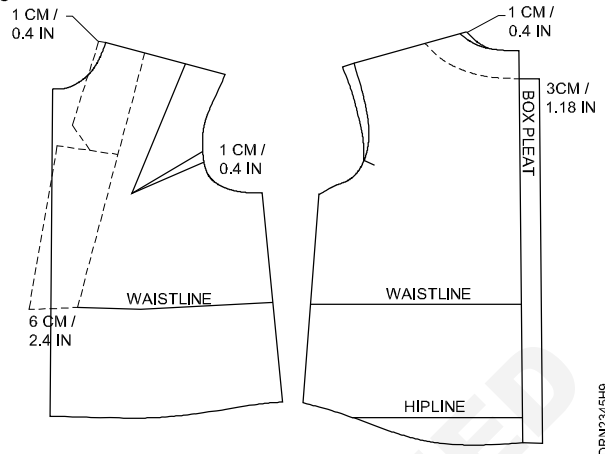
Drafting the shirt pattern

The shirt bodice pattern

- Continue the shoulder line to get a dropped shoulder. By adding just 1,5cm / 0,59in.
- The original shirt has way more longer shoulder line though. But I didn't want to have to do other modifications

to the armscye; When you drop the shoulder, you are supposed to lower and widen the underarm region, too. (Fig 9)

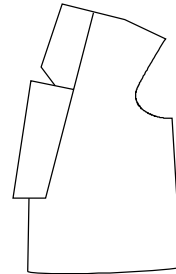
Fig 9



DRN2345H9

- Try starting at the waistline and went for 6cm / 2,4in in width, half of which extends from the c. front. Spoiler alert: Later ended up moving the starting point upwards.
- Add 1cm / 0,4in to the shoulder line towards the neck because the collar would anyways tend to open by itself.
- The neckline then continues to the backside.
- Shape the bodice front a bit by adding a little dart that at the same time gets rid of some extra volume at the armscye. (Fig 10)

Fig 10

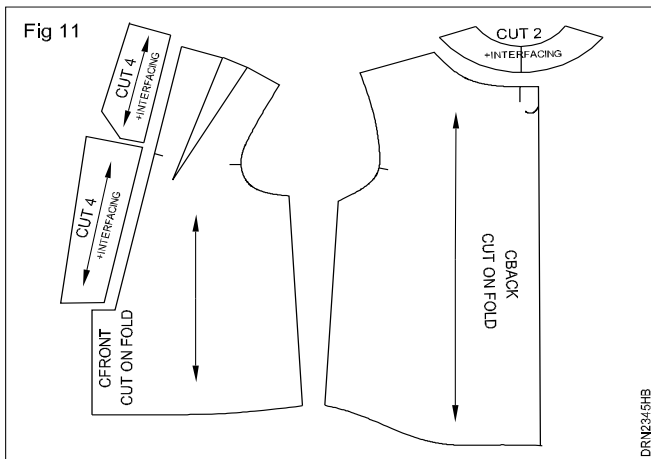


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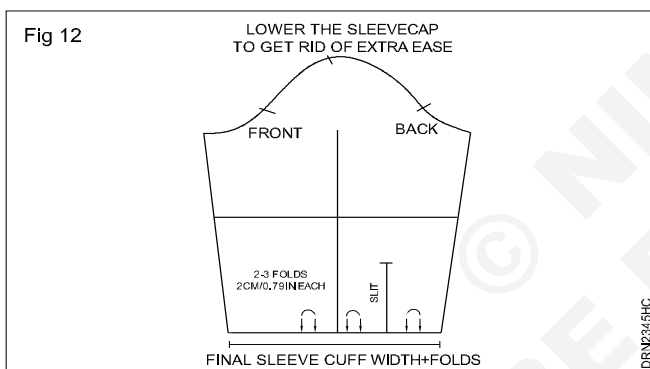
- Unite it at the chest point and then rotate towards the shoulder. Re-draw the armscye.
- The seam at the center front seemed useless so to leave it out.
- At the back you just make the same modifications to the shoulder line and add a box pleat at center back.
- Decide the shirt length and the shape of the hemline. Shirt is a bit longer at the back with a slight curve. (Fig 11)

The shirt sleeve pattern

- The shirt will also need a sleeve. Your basic bodice pattern should have a sleeve to go with it.
- Lower the sleeve cap the same amount you dropped the shoulder. Then check the amount of ease you have. You might have to lower some more. This kind of shirt sleeves shouldn't have almost any ease. 1cm / 0,4in max. Especially going for French seams.

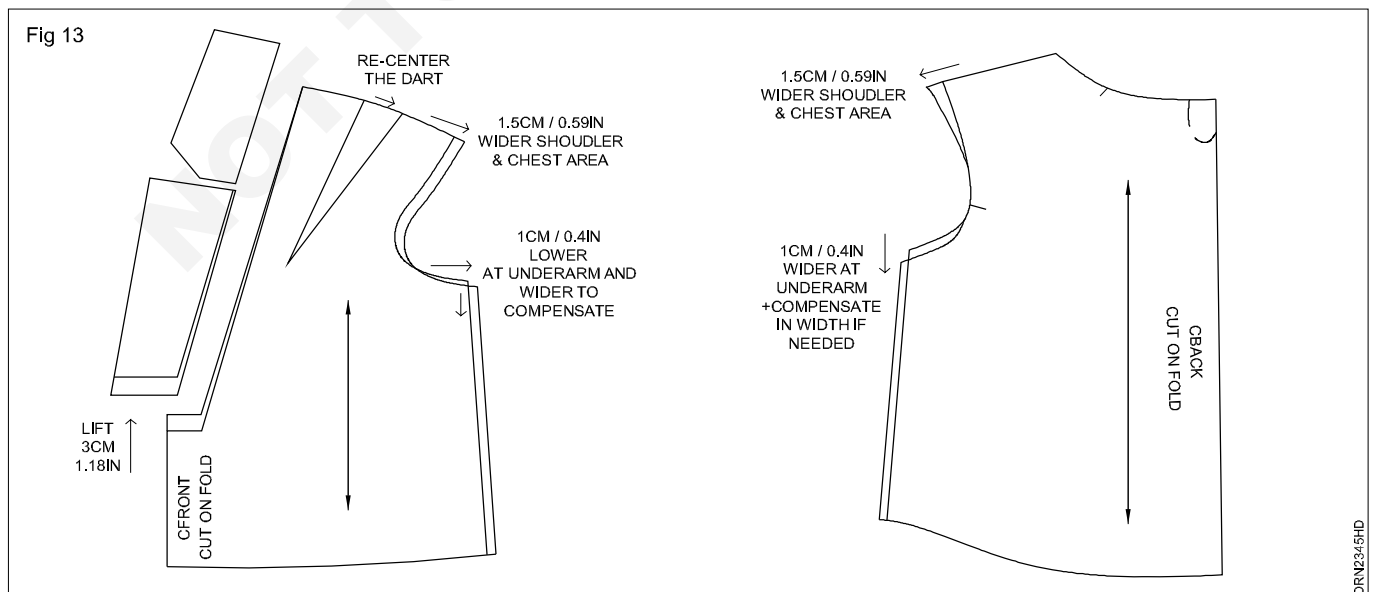


- Unless your sleeve cuff will be particularly narrow, shorten the sleeve a couple of cm or an inch.
- The sleeve hem width will be the sum of cuff width and the folds. So measure your wrist imagining how loose you want your cuff to be closed.
- The overlap will be covered with the placket, don't count that in here.
- Also want to have 2-3 folds, each 2cm / 0,79in wide. (Fig 12)



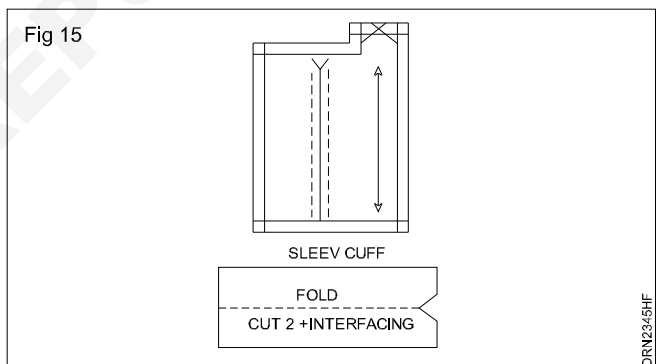
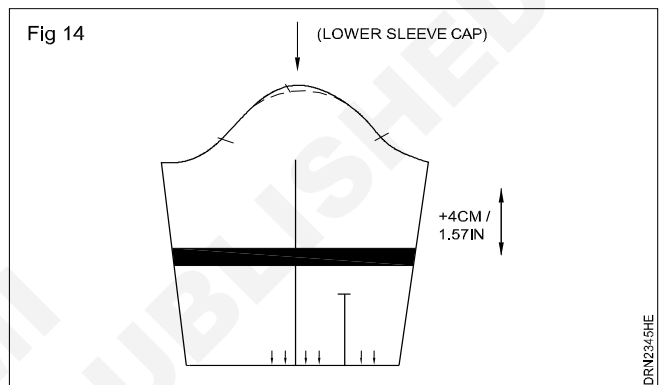
Placket & Cuff

The placket will be placed as in the drawing, at the back side of the sleeve. So draw a slit, choosing the length. The folds will be around it and going towards the placket.



Bottom of Form

- Adjust the slit length so that it's the same on the placket- and sleeve pattern. Also, this placket works with 2cm / 0,79in wide cuff overlap. So if you want a wider overlap, add twice that amount to the right side of the placket.
- As for the cuff, it's just a rectangle. Already have the length as decided earlier. Just add the overlap, which can be something like 2-3cm. (Mine is 2cm.) Then all that's left is the height.
- The sleeve cuff can be folded in two, so the rectangle will be twice the height of cuff. If cuff is 6cm high, (so that makes the total 12cm,) and has a little angle detail at the overlapping bit. Add the seam allowance all around if we prefer. (Figs 13, 14 & 15)



Gents Shirt

Objectives: At the end of this exercise you shall be able to

- stitch a sleeve with yoke and 2 side pleats in back
- stitch and attach a cuff
- fix the yoke on back
- attach the shirt collar.



Scan the QR Code to view
the video for this exercise

Requirements

Tools / Instruments

- Cutting table - 1 No.
- Measuring tape - 1 No.
- Meter scale - 1 No.
- Scissors - 1 No.
- Cello tape - 1 No.
- Marking chalk - 1 No.

Materials

- Plain design fabric - 10 m.
- Plain design one side fabric - 10 m.
- One way fabric - 10 m.
- One way one side fabric - 10 m.



DRN234/E1

Measurements

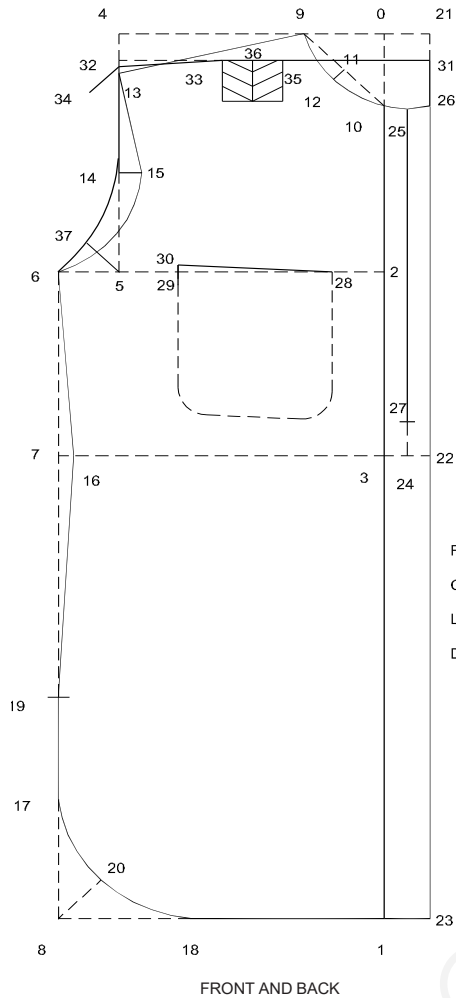
- Full length = 65 cm
 Natural waist = 31 cm
 Neck = 32 cm
 Shoulder = 35 cm
 Chest = 70 cm
 Sleeve length = 52 cm

Material

1.75 X 0.90 m Terrycot/Cotton (Shirt material)
0.12 x 0.90 cm fusing material
6 buttons

Fig 2

INSTRUCTIONS FOR DRAFTING



Front

Square out horizontally and vertically and from 0

0-1 = FL

0-2 = Ch/4

0-3 = NW

0-4 = Sh/2

2-6 = Ch/4 + 4 cm

0-9 = 0-10 =

N/6 + 1 cm

9-11 = 1/2 of 9-10

11-12 = 0.75 cm

4-13 = Ch/24

5-14 = 1/2 of 13-5

14-15 = 1.25 cm

7-16 = 1 cm

8-17 = 8-18 = Ch/8

8-19 = FL/4

8-20 = 4 cm

0-21 = 3 cm

3-24 = 10-25 =

1/2 of 3-22

24-27 = 2.5 cm

5-28 = Ch/24 + 1 cm

28-29 = Ch/6 - 1.5 cm

28-30 = 0.5 cm

Back

21-31 = 4-32 = Ch/36

32-33 = Ch/12 + 1 cm

32-34 = 1/2 of 32-13

33-35 = 4 cm

33-36 = 1/2 of 33-35

5-37 = 1/2 of 5-6

Square out from 2,3,1

Square down from 4 and mark 5

Square down from 6 and mark 7 and 8

Join 9-10, square out from 10

Square out from 11

Shape 9-12-10 (front neck)

Join 9-13 (shoulder slope)

Square out from 14

Shape 13-15-6 (front armhole)

Shape 6-16-19 (side)

Divide angle 17-8-18

Shape 17-20-18

Square down from 21 and mark 22-23

Square up from 24

Extend neck shape 9-12-10 and mark 25

Reverse the neck shape 25-10-12 from 25 and mark 26

(25-27 placket opening)

Square up from 28

Join 30-29 (pocket mouth mark)

Join 31-32

Shape 34-33

(Pleat mark)

Divide angle 34-5-6

Shape 34-14-37-6

Full sleeve

0-1 = SL - cuff width
(4 cm)

0-2 = Ch/4

2-3 = Ch/12 + 1.25 cm

1-4 = Ch/6 + 1.5 cm

4-5 = 1 cm

0-6 = Ch/24 + 1 cm

7-10 = 0.3 cm

8-11 = 0.7 cm

9-12 = 0.7 cm

3-13 = Ch/24

13-14 = 1 cm

0-15 = 1/2 of 0-6

Square out horizontally and vertically from 0

Square out from 1 and square down from 2

Square out from 3

Join 3-4 and extend

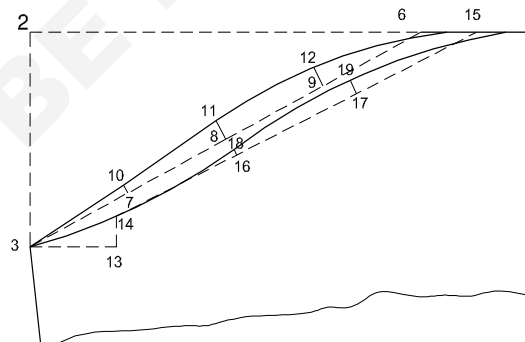
Join 1-5

Join 6-3, divide 6-3 in four equal parts and mark 7, 8, 9 and square up

Shape 0-6-12-11-10-3 (Back shape)

Square up from 13

Join 15-14
Divide 15-14 into three equal parts, mark 16, 17



SLEEVE (ENLARGED VIEW)

square up from 16 and 17

16-18 = 0.2 cm

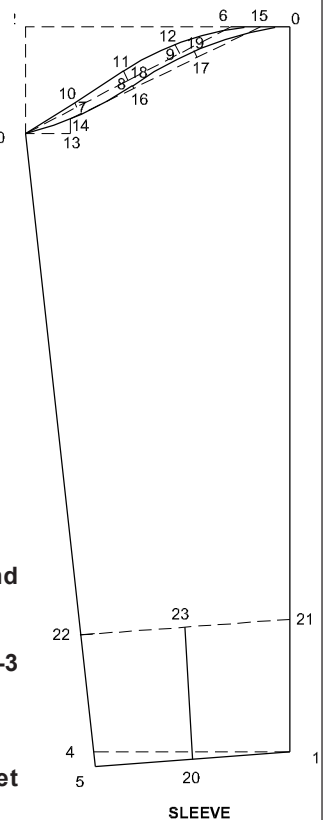
17-19 = 0.5 cm

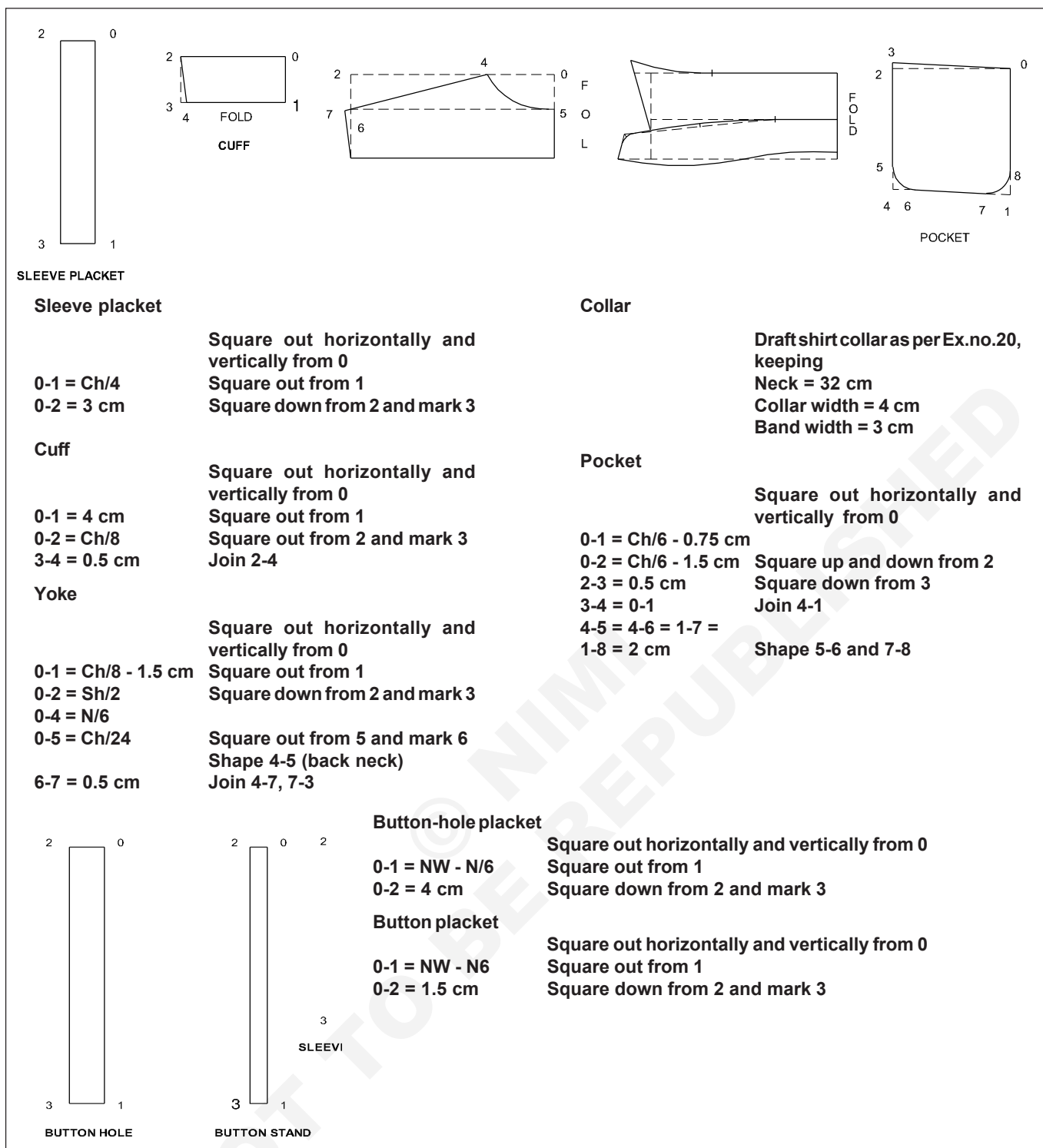
1-20 = 1/2 of 1-5

1-21 = 5-22 = Ch/8

21-23 = 1/2 of 21-22

Join 21-22
Join 20-23 (placket mark)





INSTRUCTIONS FOR MASTER PATTERN

Front and back

neck, shoulder, armhole 0.75 cm
side and bottom 1 cm

Sleeve

side and bottom 1 cm
sleeve crown 0.75 cm

Yoke

neck, shoulder, side 0.75 cm
bottom 1 cm

Placket strip

0.75 cm all around three sides

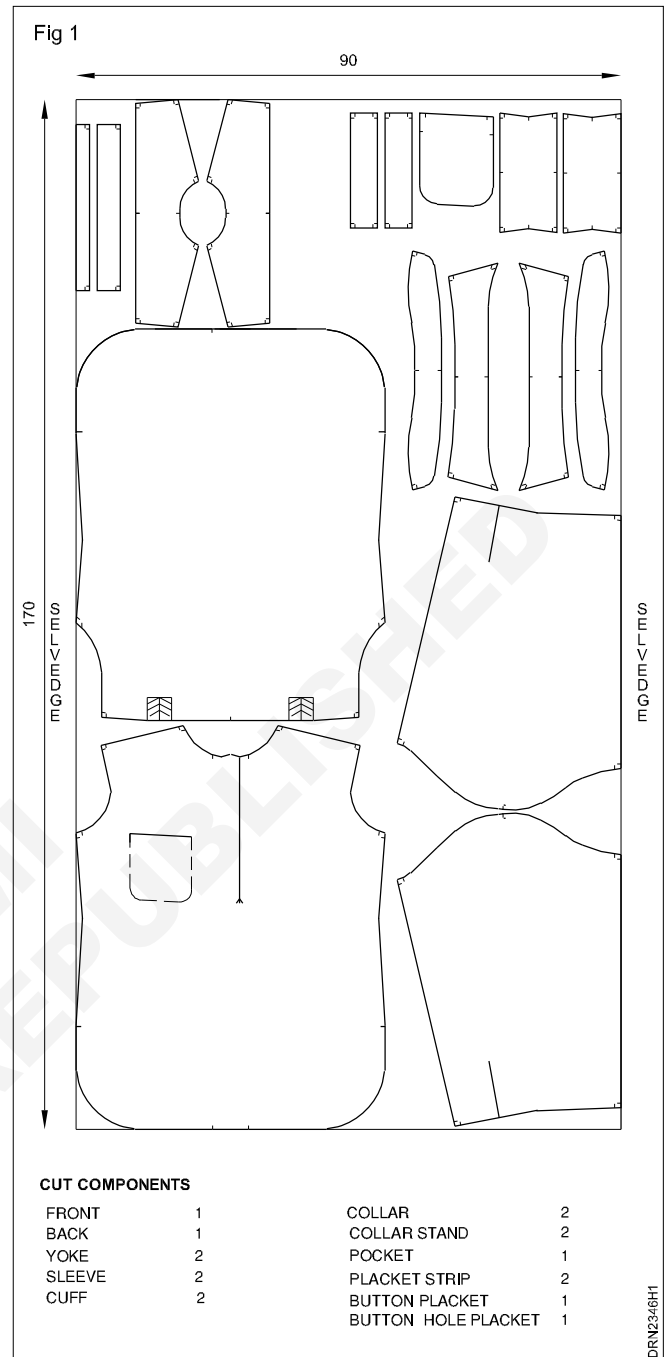
Pocket

mouth turning 3 cm
all other three sides 0.75 cm

Button and button hole plackets

three sides 0.75 cm
no seam allowance at one longer side

- Draft paper pattern according to given measurement. (Fig 2)
- Prepare master-pattern.
- Lay pattern on wrong side of fabric, transfer marks with chalk and cut all the components. (Fig 3)
- Transfer marks of pleats, pocket, placket with tracing wheel on lower layer.
- Take pattern for collar and cuff and mark on fusing (without seam allowance) and cut.
- Prepare half open placket (Italian placket) at front part.
- Prepare chest pocket (patch pocket) and attach it on the left side of front part on mark.
- Set reverse pleats on back part on mark. Attach yoke and join front and back pieces. (SS.No.1)
- Prepare one piece placket on sleeves at mark of slit.
- Attach sleeve on armhole with shirt-sleeve method.
- Stitch under arm seam and side seam matching the balance marks.
- Prepare and attach cuff with sleeve. (SS.No.2)
- Prepare shirt collar and attach with gorge (neckline). (SS.No.3)
- Turn the bottom by 0.25 cm first, then take 0.5 cm for second turn on front and back of shirt.
- Over lock all raw seam allowances.
- Cut and make one-bar-one-fan buttonhole in horizontal position on collar stand (left side). Place it in centre of stand, 1 cm away from edge.
- Divide the remaining distance of opening into four equal parts and make three vertical one-bar-one-fan buttonholes, 1 cm away from edge.
- Stitch buttons accordingly.
- Stitch button and button hole in the centre of each cuff 1 cm away from edge, place them in horizontal direction.
- Finish and press.

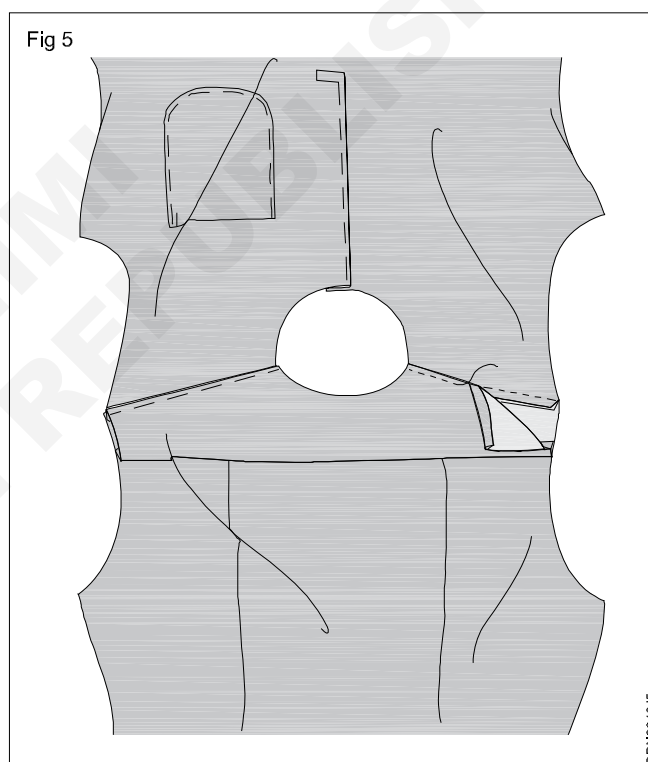
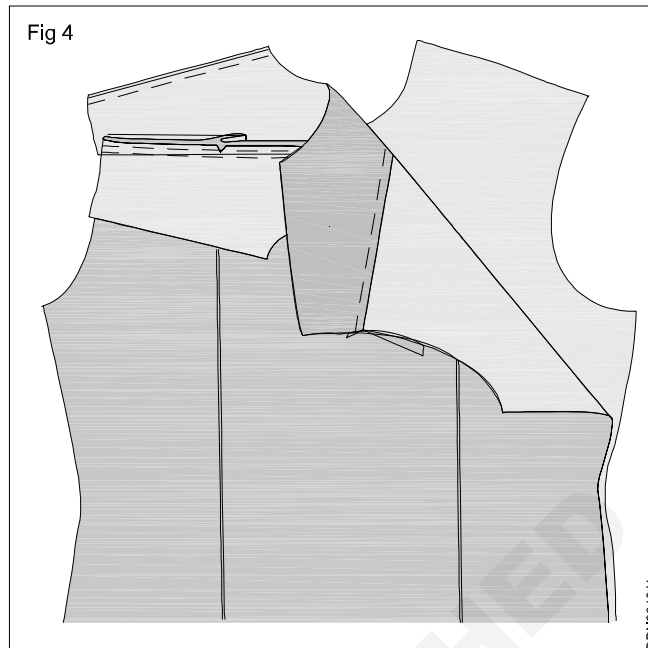
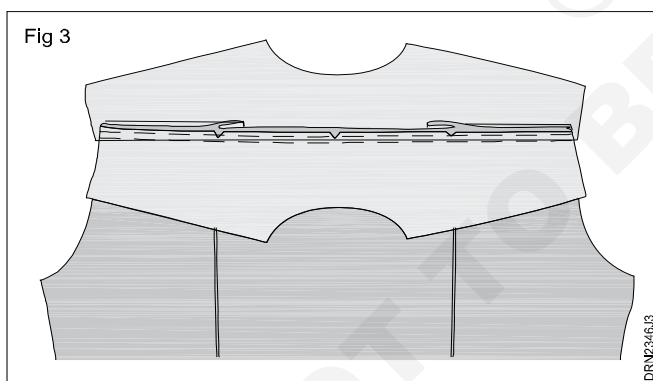
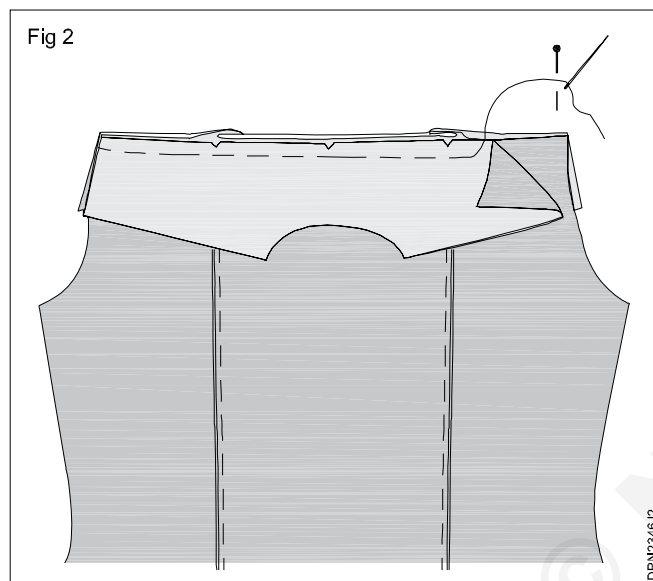
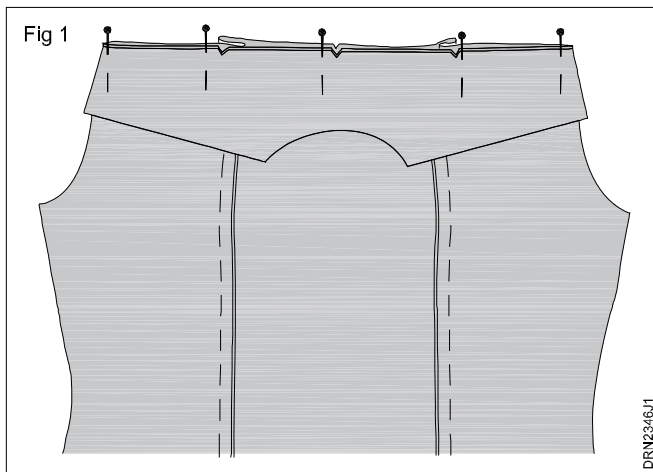


Yoke

Objective: At the end of this exercise you shall be able to

- **fix yoke on back.**

- 1 Set 2 reverse pleats on marks and baste.
- 2 Match raw edges of one yoke piece (neckline down) with back on notches of centre front lines, wrong side of back and right side of yoke together. (Fig 1)
- 3 Take other yoke piece and place it on back piece with right sides and upper raw edges together. Stitch. (Fig 2)
- 4 Turn lower part of inside yoke (neckline on top) and stitch seam allowance to inside yoke. (Fig 3)
- 5 Join lower yoke with front bodice on shoulder line. Stitch on both shoulder lines leaving seam allowance. (Fig 4)
- 6 Turn the raw edge of upper yoke at shoulder line by 0.75 cm. Place over seam allowance of lower yoke and stitch with top stitch. (Fig 5)

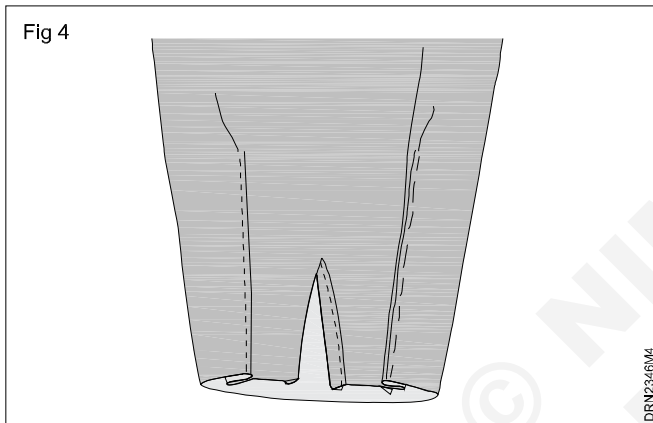
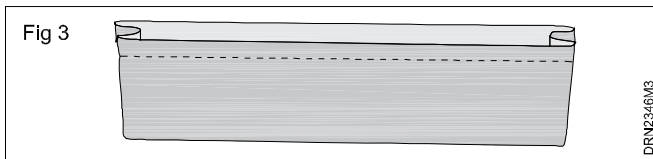
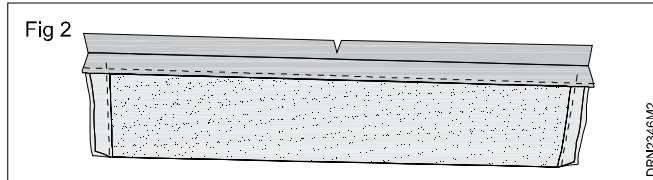
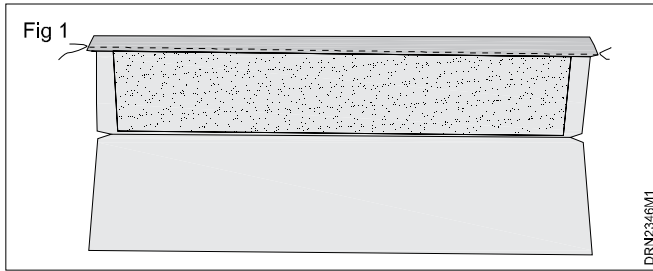


Attaching cuff

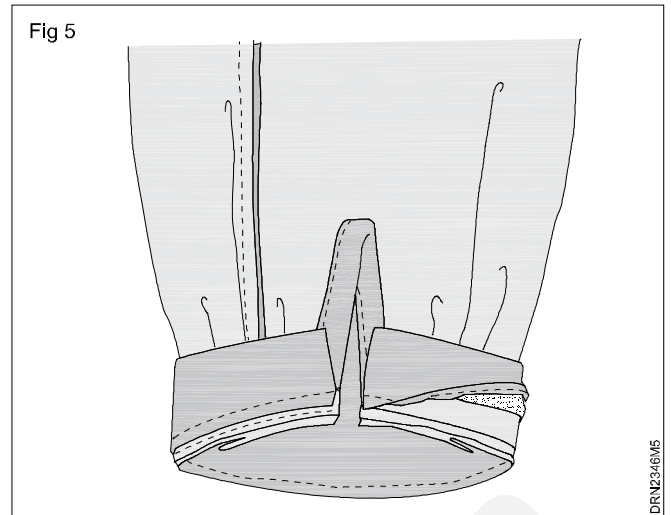
Objective: At the end of this exercise you shall be able to

- **prepare and fix cuff to sleeve bottom.**

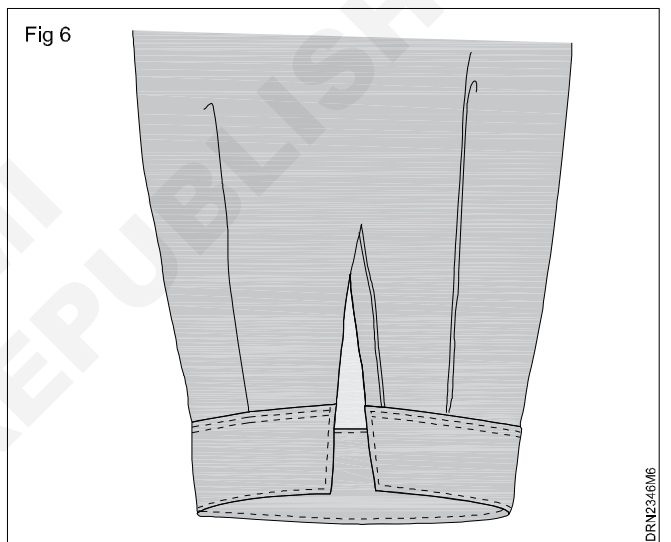
- 1 Place cuff pattern over fusing and cut two pieces. Leaving seam allowance on three sides place fusing piece on wrong side of the material.
- 2 Turn the longer edge of seam allowance inside. Baste and stitch 0.75 cm away from edge on right side.(Fig 1)
- 3 Fold cuff on centre line, right sides together. Baste and stitch from fold side leaving 2 mm unstitched at the folded edge and lock the stitch. (Fig 2)
- 4 Turn the cuff inside out (take care of corner). Cut notch at centre of raw edge. Press. (Fig 3)
- 5 Press the placket inside and measure the sleeve bottom. The difference between cuff length and sleeve bottom is the measurement for two pleats. Prepare 1st side pleat at side seam. Prepare another side pleat at the same distance on the other side placket. (Fig 4)
- 6 Baste and stitch underside of cuff (unfused) to wrong side of sleeve bottom matching centre marks. (Fig 5)



7 Turn the cuff unit up and press seam allowance inside the cuff. Then press the cuff from folded edge.



8 Baste the sleeve bottom along with cuff edge through all layers. Stitch 2 mm away from edge along sleeve bottom and cuff. Lock the stitch and press. (Fig 6)



Attaching shirt collar

Objective: At the end of this exercise you shall be able to

- attach shirt collar.

- 1 Make a row of machine stitches on neck seam line leaving 0.75 cm seam allowance. Clip into neck seam allowance at a distance of 2 cm. This will permit the collar to fit smoothly on to the shirt. (Fig 1)
 - 2 With rightsides together match centre of stand (unfused side) and neckline. Baste the stand to the garment along the neck seam line. Stitch on seam line. Secure stitches at both ends. (Fig 2)
 - 3 Press the seam flat and trim the seam allowance. (Clip seam allowance if the fabric is stiff or thick.) (Fig 3)
 - 4 Press the seam allowance open, then towards collar stand. (Fig 4)
 - 5 Bring the edge of fused collar part down and align it with the neck seam line. Pin and baste. (Fig 5)
- Stitch on fused collar stand all around. Start stitching from centre on upper edge. Take care that no folds will come while stitching. Finish and press. (Fig 6)

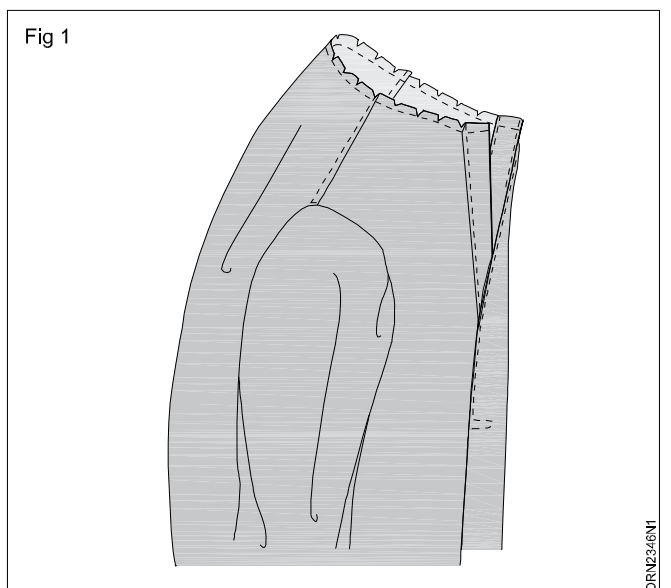
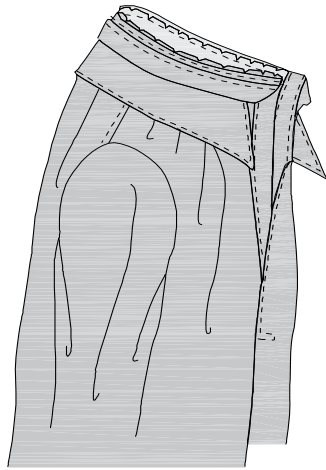
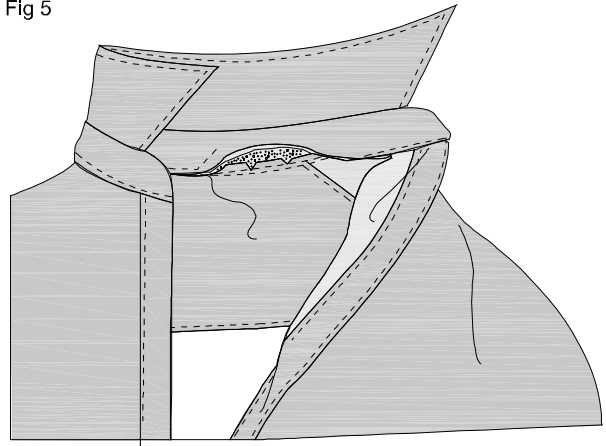


Fig 2



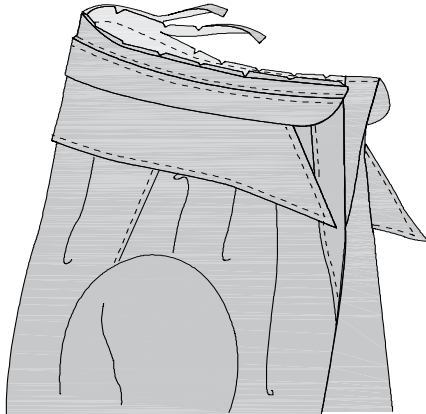
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Fig 5



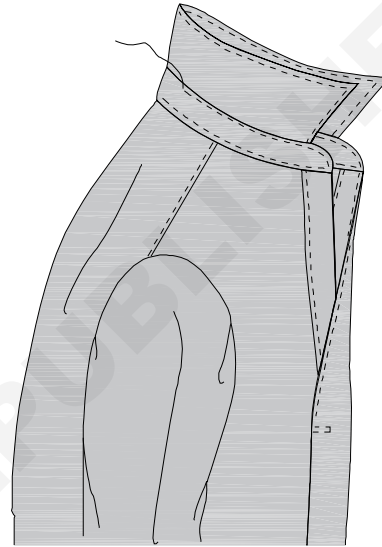
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Fig 3



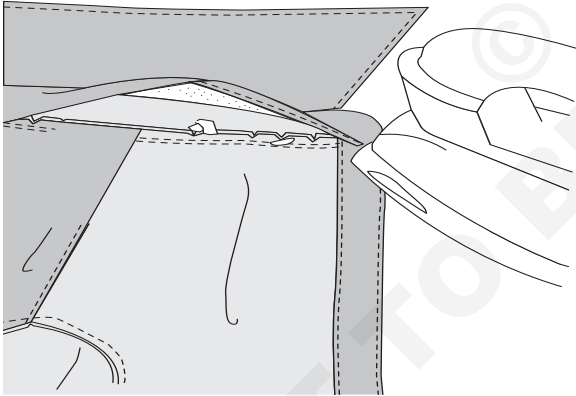
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Fig 6



DRN23/6N6

Fig 4



DRN23/6N4

Job sequence

Job planning

Objective: At the end of this exercise you shall be able to

- **organize a tailoring job (gents shirt) in dependently with the help of a job planning sheet.**

- In the following exercise you shall train your job planning abilities. In this exercise you shall carry out the planning work independently. Therefore no instructions are given.
- Your job is to make a gent's shirt according to the style feature given in the job planning sheet. For drafting the pattern you can make use of the instructions in Ex.42, but take care for the modifications in front placket! Before you start your work do the following planning steps:
 - Take the measurement from a person you want the shirt to be stitched for.
 - Note down tools/machines and material you require for the job.
 - Define and note down the measurements for the allowances at seams, turnings, facings etc.
 - Note down an appropriate sequence of working steps for making the skirt.

- Calculate the price (refer to trade theory)
 - i fine ou the cost for the material
 - ii overheads and tax are given in the job planning sheet.
- Discuss your results with the instructor before you start your work.

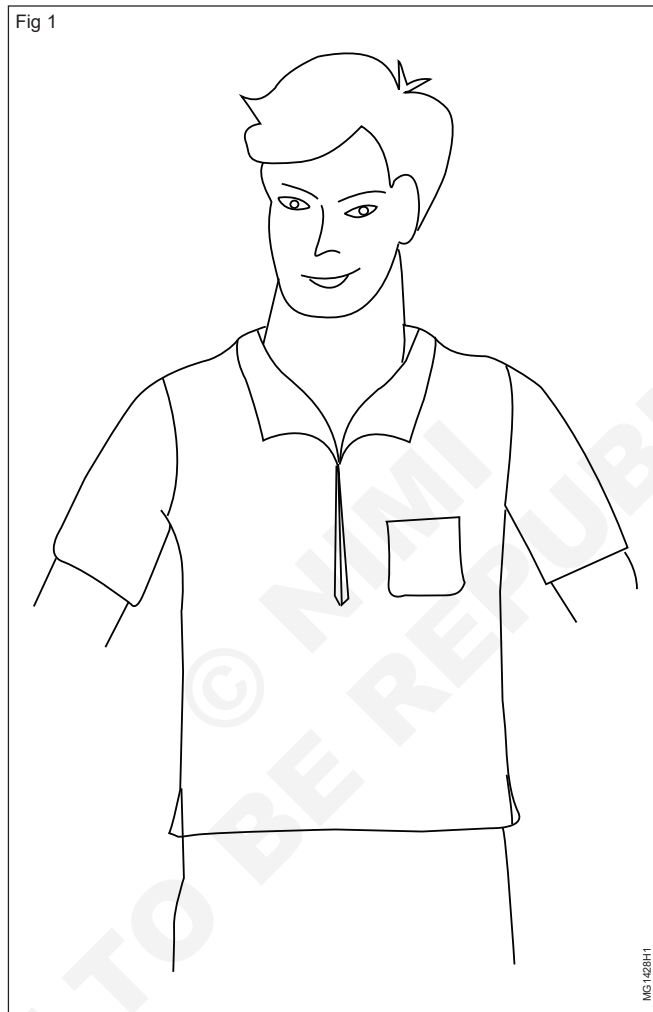
Job Planning Sheet

Type of garment	: Gent's shirt					
Style features	: Front open Side seams fully closed Sleeve with cuff and one-piece placket One chest pocket Back with yoke Straight bottom Box pleat at centre back					
Measurement						
Upper garment				Lower garment		
FL	Sh	SL		FL	W	RC
NW	B/Ch	SB		LL	H	RB
BL	W			ILL	RKn	N
Tools/machines				Material		
Allowances (master pattern)				Cut components		
Job sequence						
Calculation of price						
One tailor	-	Rs. 20 per hr.				
Overheads	-	95% labour cost				
Tax	-	13% manufacturing price				

Construct a gent's shirt - Style II

Objectives: At the end of this exercise you shall be able to:-

- draft and cut the paper pattern of t-shirt
- prepare the master pattern
- lay the fabric and cut the t shirt fabric components
- sew and finish the t-shirt.



Measurements			Material
Full length	=	78 cm	1.40X1.27 m poly cot 2 brown sheets
Natural waist	=	42 cm	
Neck	=	37 cm	
Shoulder	=	44 cm	
Chest	=	90 cm	
Sleeve length	=	25 cm	
Solar width	=	4 cm	

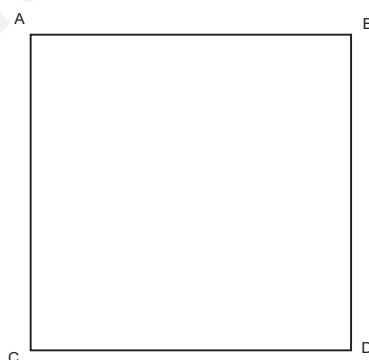
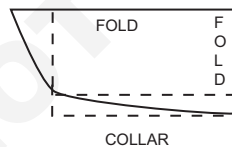
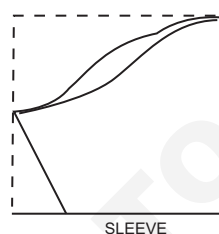
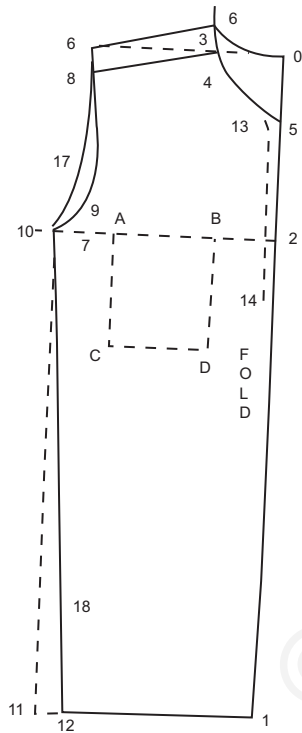
PROCEDURE

TASK 1 : Draft and cut the paper patter of T-Shirt

- 1 Lay one brown sheets on the drafting table with lengthwise folded.
- 2 Draft the pattern of t- shirt front part following the instructions for drafting.
- 3 Similarly draft the back part on the other brown sheet.
- 4 Draw the sleeve and collar drafting on the balance sheets available.

Fig 2

Instruction for Drafting



Front

$$0-1 = FL + 1 \text{ cm}$$

$$0-2 = ch/4$$

$$0-3 = ch/12$$

$$0-5 = 3-4$$

$$0-6 = sh/2 + 1 \text{ cm}$$

$$6-8 = 2.5 \text{ cm}$$

$$7-9 = 3 \text{ to } 3.5 \text{ cm}$$

$$1-10 = ch/4 + 4 \text{ cm}$$

$$11-12 = 2.5 \text{ cm}$$

$$5-13 = 0.75$$

$$13-14 = ch/4 + 2.5 \text{ cm}$$

$$7-A = 2.5 \text{ to } 3 \text{ cm}$$

$$A-B = ch/8 + 1.5 \text{ cm}$$

$$A-C = B-D = ch/8 + 3 \text{ cm back}$$

$$0-15 = 0.75 \text{ cm}$$

$$3-16 = 3 \text{ cm}$$

$$17 \text{ is midpoint of } 6-7$$

$$12-18 = 10 \text{ cm or to taste}$$

Square out horizontally and vertically from 0

square down 3 to mark 4

join 4-5, shape neck 5-3

square down 6 to 7

join 3-8

shape scye 8-9-10
square down from 10 to 11

join 10-12

square down 13 to 14 for
placket marking

A-B is marked on 10-2
line

square down A-B to mark
C-D

shape 15-16 join
16-6

shape armhole
6-17-10

for slit marking cut
13-14 in layer of the
pattern and fabric

Sleeve

Refer ex no. 14.23

Collar

Refer ex no. 14.25

Pocket

$$A-B = C-D = ch/8 + 1.5 \text{ cm}$$

$$A-C = B-D = ch/8 + 3 \text{ cm}$$

Pattern cutting

- 1 Cut the drafted paper pattern of t-shirt along the following cutting lines.
- 2 Leave sufficient space around each drafting and cut.
- 3 the cutting lines of T - shirt are

Front	—————	14-13-3-8-9-10-18-12-2
Back	—————	0-15-16-6-8-17-10-18-12-2
Sleeve	—————	refer ex.no.14.23
Collar	—————	refer ex.no.14.25
Pocket	—————	A-B-D-C-A

TASK 2 : Prepare the master pattern

- 1 Add the below mentioned master pattern allowance to the cut paper pattern of t - shirts.
- 2 Cut all the patterns into master patterns with the added allowances for interns, seams etc.
- 3 Name all these patterns with its description, like size, measure etc. for future reference.

Instructions for master pattern

Front and back

Neck, shoulder, armhole	0.75 cm
Side	2 cm
Bottom turning	3 cm

Sleeve

Top	0.75 cm
Underarm side	2 cm
Bottom	3 cm

Collar

Lower edge	1 cm
Sides, upper edge	0.75 cm

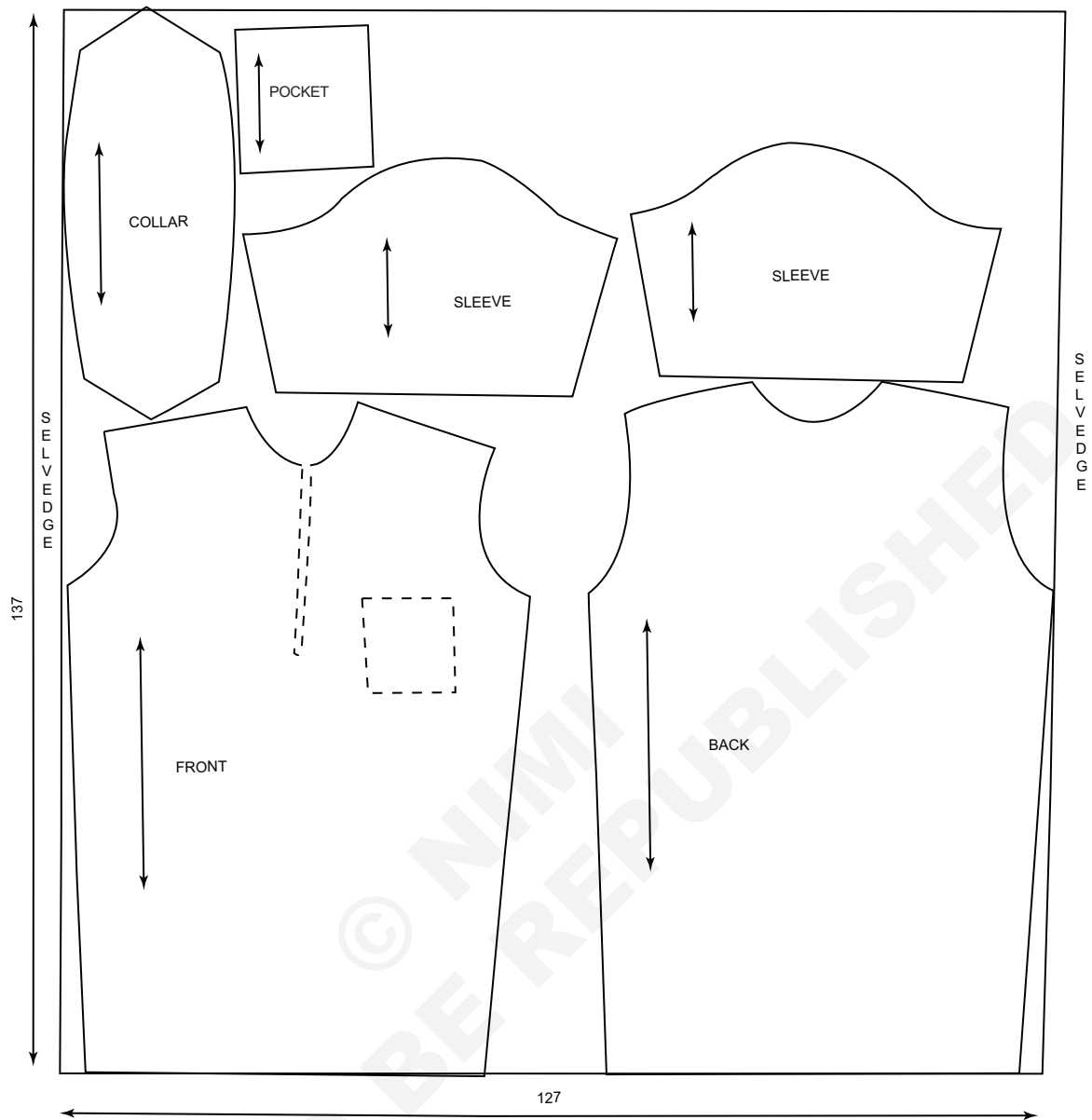
Pocket

Pocket mouth	2 cm
All other sides	0.75 cm

TASK 3 : Lay the fabric and cut the T-Shirt fabric components

- 1 Lay the fabric open on the cutting table with its wrong side facing.
- 2 Spread and arrange the master pattern of t-shirt economically on the fabric.
- 3 Mark the outline of the patterns, mark required number of components of the pattern transfer the pocket & slit marking to the fabric with a tracing wheel.
- 4 Remove the pattern.
- 5 Cut the fabric into t-shirt components on the marking using a sharp pointed scissors.
- 6 Cut notches at sleeve crown, slit open of the front and back part etc to set the positions. (Fig 3)

Fig 3



Cut components

Front	1
Back	1
Collar	1
Sleeve	2
Pocket	1

MG1427H4

TASK 4 : Sew and finish the T-Shirt

Style features	Materials and trimmings
<ul style="list-style-type: none">• Open collar• Zipper placket• Patch pocket• Side slit	<ul style="list-style-type: none">• Cut components of t-shirt• Matching colour sewing thread• Machine needle no.14

PROCEDURE

1 The cut components of T-shirt are

Front	1
Collar	1
Back	1
Pocket	1
Sleeve	2

2 Stitch the centre front open with the zipper placket (SS.No.1).

3 Join front and back parts together with a seam at their shoulders.

4 Prepare and attach open collar to the neckline.

5 Stitch patch pocket with its mouth finished at the right hand side of the front bodice.

6 Finish sleeve bottom with machine stitching giving interns.

7 Attach sleeve to the body part in the shirt sleeve method.

8 Stitch under arm seam and side seam till the slit mark.

9 Finish slit opening with double folds and stitch bottom with machine stitching.

10 Finishing, trim and press.

Skill Sequence No.1

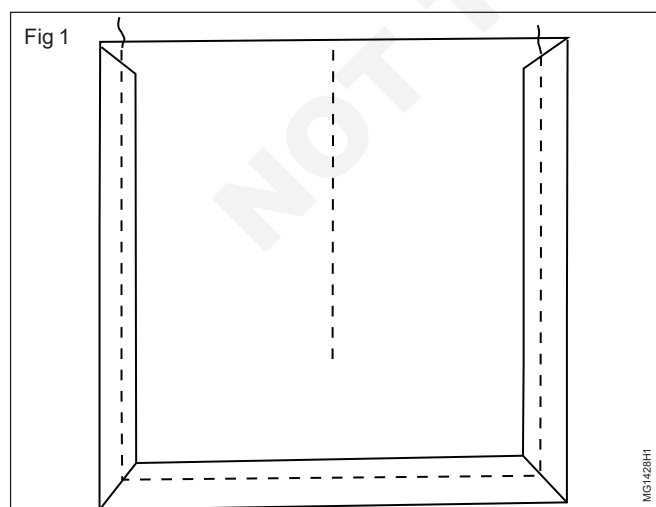
Centered application of zipper placket

Objective: This shall help you to:-

- **stitch the zipper pocket at the back open.**

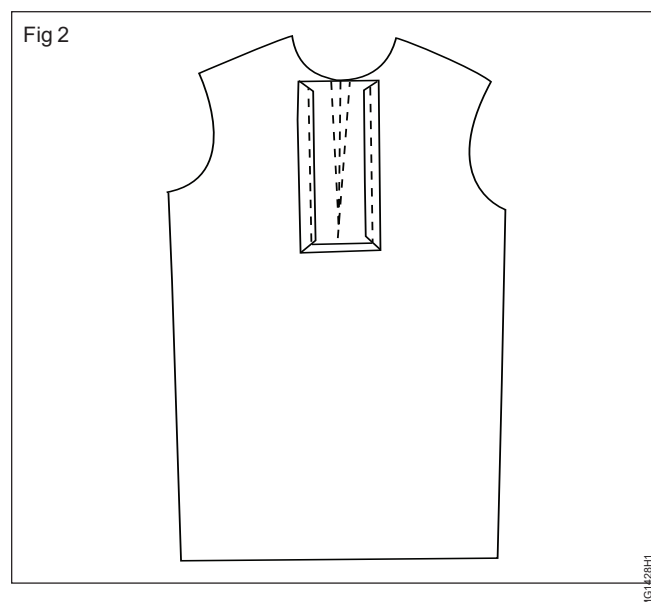
Measure and mark the length of front open the wrong side of the front part.

Take a facing piece of length equal to back open length and width of about 6 cm. Turn the edges of facing by 0.5 cm and leave the top edge. (Fig 1)

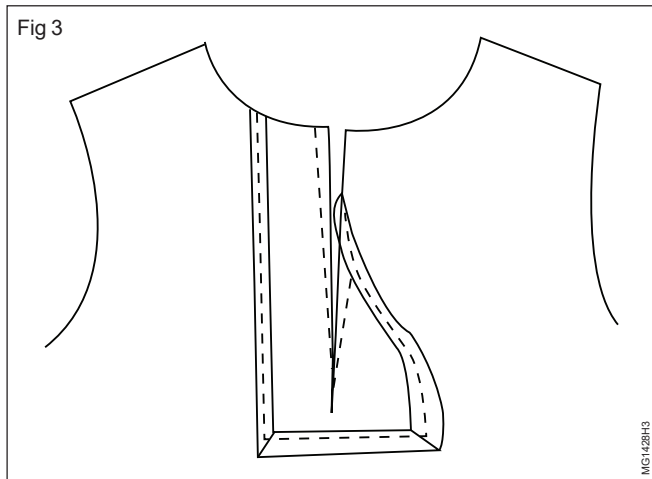


Place the facing piece on the front part with right sides together. match the centre lines and baste on the line.

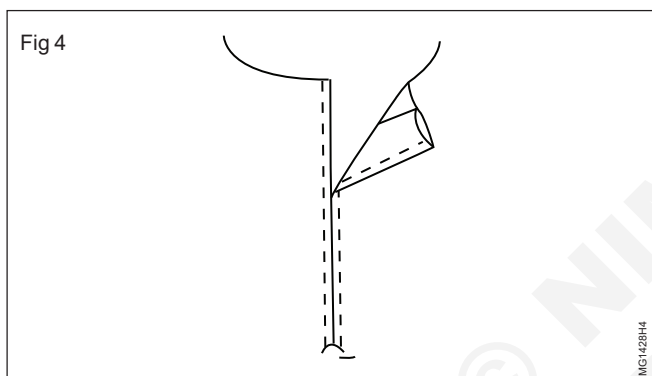
Mark 5mm on both sides of the centre line on the top edge. Join two marks with bottom end of centre line in V-shape. (Fig 2)



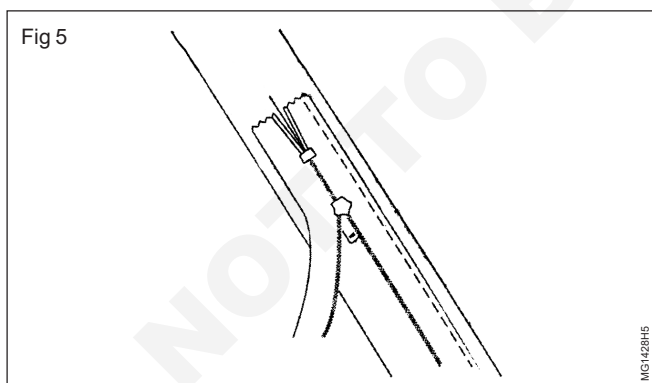
Slash on the centre line leaving 2mm at peak point. Turn the facing on the wrong side and press it gently to make out the edge.(Fig 3)



Stitch top seam from right side on the edges of the placket outlines.(Fig 4)



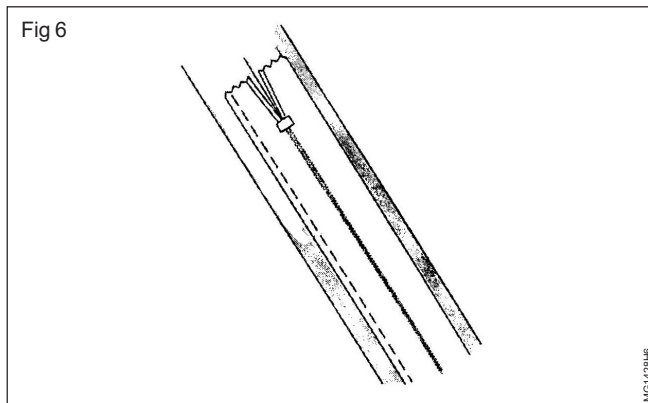
Open the zipper and place the right side of zipper on the wrong side of the fabric facing piece. Keep the chain edge of the fabric up the placket opening mark. Baste the zipper tape with one seam allowance.(Fig 5)



Close the zipper. Baste the other side of the zipper tape with other seam allowance.(Fig 6)

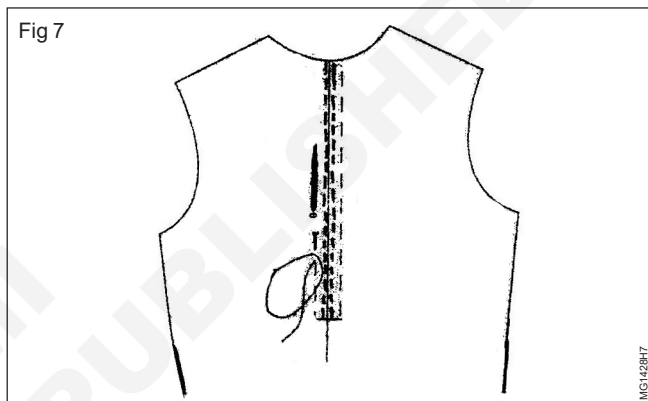
Lock of zipper end should be kept towards the end of the placket (opening).

Fig 6



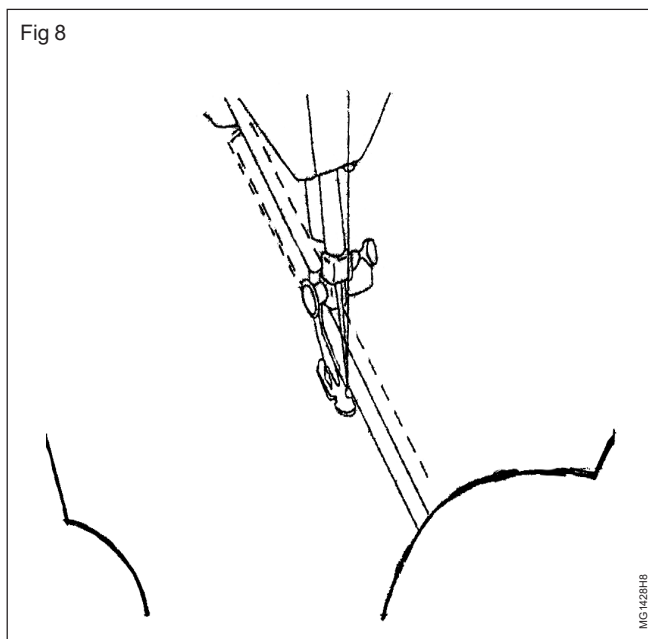
Turn the fabric with right side up and spread the fabric as flat as possible. Now baste from right side through all layers of the fabric, 6mm away from seam line. Start basting from the seam line at the bottom end of the opening. (Fig 7)

Fig 7

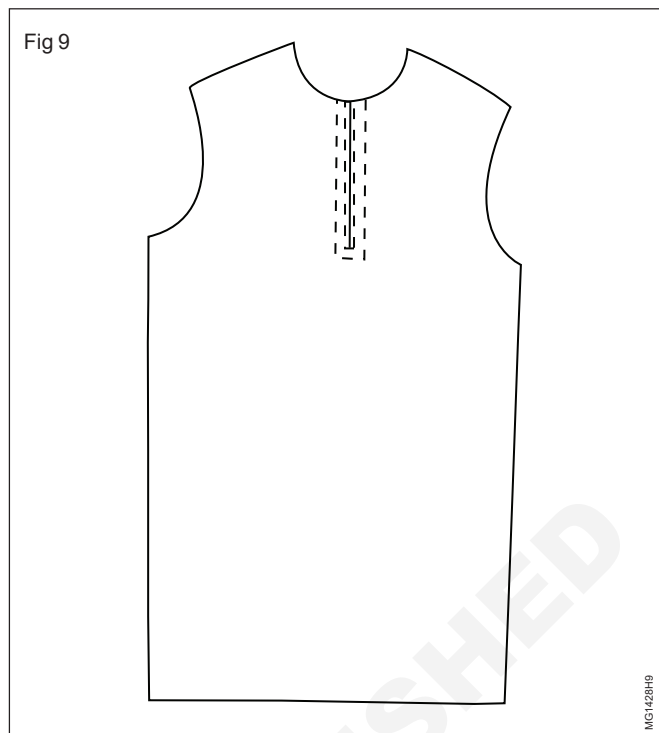


Start machine stitching from the right side along the basting from the top end of the fabric using a zipper foot. Stop in the end of opening just below the lock of the zipper. Make pivot and cross to other side and stitch up to the end of fabric.(Fig 8)

Fig 8



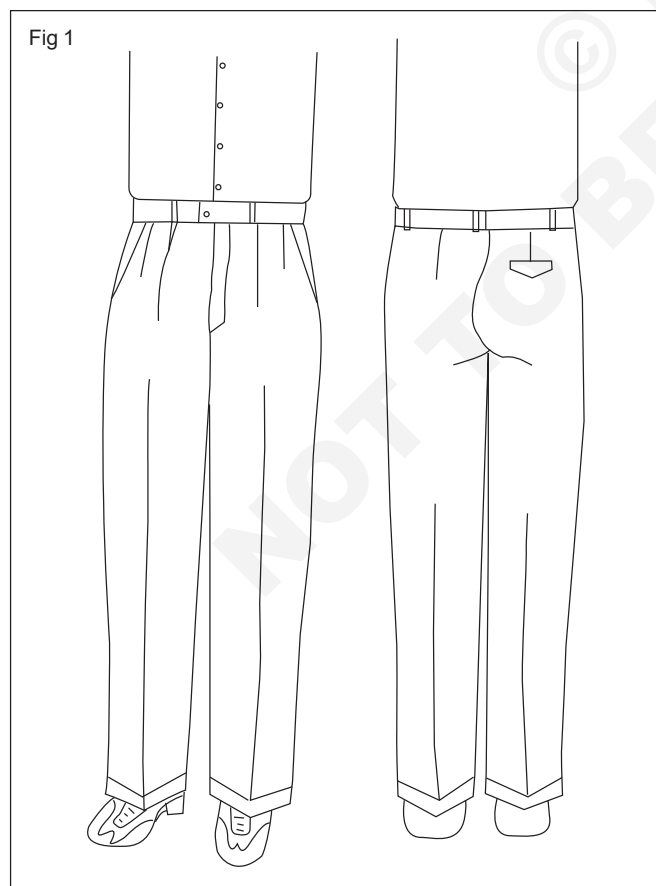
Remove basting and trim the threads. (Fig 9)



Construct a gent's trousers - Style I

Objectives: At the end of this exercise you shall be able to:-

- draft and cut the paper pattern of pleated trousers
- prepare the master pattern
- lay and cut the required fabric components for stitching a pleated trousers
- stitch and finish the gent's pleated trousers.



Measurements			Material
Full length	=	104 cm	1.66 x 1.50 m Terrycot / denim 0.80 x 0.90 m poplin 2 Brown sheets
Inner leg length	=	73 cm	
Waist	=	76 cm	
Hip	=	92 cm	
Bottom	=	43 cm	
Belt width	=	4 cm	

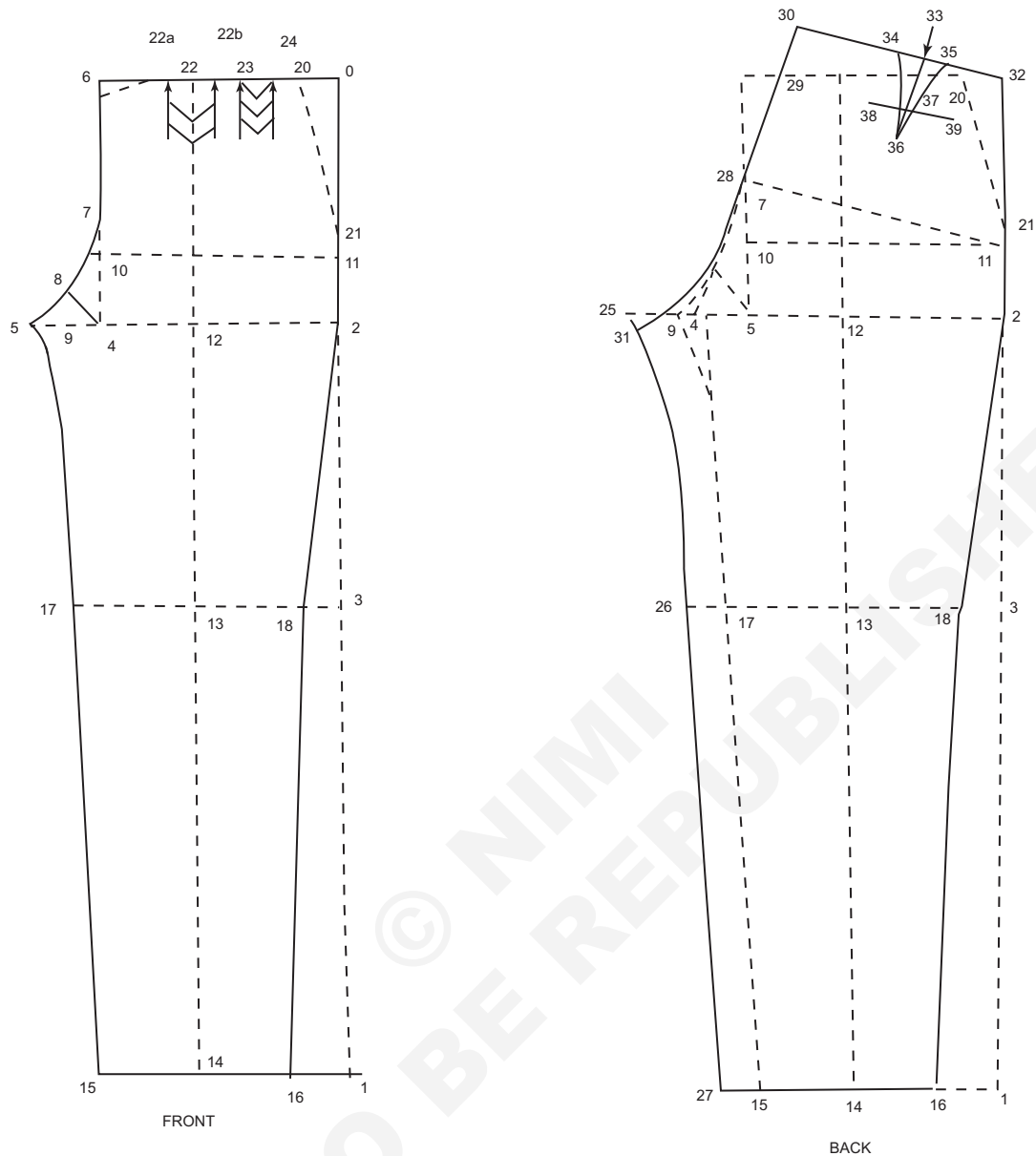
PROCEDURE

TASK 1 : Draft and cutting the paper pattern of gent's pleated trousers

- 1 Lay one brown sheet open on the drafting table.
- 2 Draft the front and back part pattern of pleated trousers following the instructions for drafting.
- 3 Leave enough space around each drafting.
- 4 Draft all the other patterns waistband fly, fly shield, pocket jetting, pocket pouch etc on the other brown sheet.

Front part			
0-1	=	Fl- waist band (4 cm)	Square out horizontally and vertically from 0
1-2	=	ILL - 1 cm	Square out from 1
2-3	=	ILL/2 - 5cm	Square out from 2
2-4	=	H/4 + 4 cm	Square out from 3
4-5	=	H/12 - 1.5 cm	Join
0-6	=	Same as 2-4	Extend 4 to 5 with a line square up from 4 and mark 6
4-7	=	H/8 + 1.5 cm	Divide angle 6-4-5
4-8	=	4-5/2 + 0.75 cm	
5-9	=	2 cm	Shape 6-7-8-5
4-10	=	H/12	Mark 10 at 6-4 line for body rise
2-11	=	4-10	
2-12	=	½ of 2-5	Join 10-11
3-13	=	1-14 = 2- 12	Square down 12 to mark 13 and 14
14-15	=	bottom / 4	Join 12-12-14
14-16	=	14-15	Join 15 to 9 with a straight line
13-18	=	13-17	Square out 3 13 to mark 17 at 15-9 line
6-19	=	1 cm	Shape 5-17-15 (liner shape) and 2-18-16 (outer shape)
0-20	=	H/24 + 1 cm	

Fig 2



MG1415H1

$$11-21 = 2 \text{ cm}$$

22-22a = 22-22b = 2 cm (for pleat)

22b-23 = 3 cm (distance between two pleats)

23-24 = 3cm (for pleat)

Back part

9-25 = 5 to 6.5 cm

$$17-26 = 2.5 \text{ cm}$$
$$15-27=2.5 \text{ cm}$$
$$7-28 = 2.5 \text{ cm}$$
$$6-29=2.5 \text{ cm}$$
$$29-30 = 2.5 \text{ cm}$$
$$25-31 = 1 \text{ cm}$$
$$30-32 = W/4 + 3 \text{ cm}$$
$$32-33 = H/12 + 1.5 \text{ cm}$$
$$33-34 = 33-35 = 1.25 \text{ cm}$$
$$33-36 = H/8$$
$$33-37 = H/12$$
$$37-38 = 37-39 = H/16$$

Fly


$$6-40 = 4-41 = H/24$$
$$41-42 = H/6$$
$$8-43 = 1 \text{ cm}$$
$$43-44 = 1.75 \text{ cm}$$
$$41-45 = H/24$$

Joined 20 and 21 for slant pocket

Square up from 12 and mark 22

Copy the front pattern (dotted lines) which will help you to create back pattern as follows

Extend line 9 to 25

Shape 25-26-27

Mark 28 from 7 for seat angle. (it should be increased for an erect figure and reduced for a stooping figure)

Join 4-28 with a straight line and produce it to mark 29

Extend line 29 to mark 30

Shape 30-28-31 for fork as shown

Join 30-32 with a straight line

Set the square on the point 33 along the line and draw square line

Mark dart width on either side of 33

Join 33-36

Draw parallel line with 32 - 30 dart point

Join 38 - 39 (hip pocket)

Copy the lines 6-4,4-5 from front part and shape 6-19-7-8-5 as in front fly line

Join 40-41

Draw parallel line with 4-8 from 43

Divide angle 42-41-4

Shape 44-45-42-40

Fly shield (lining)

Copy the drafting of fly

Extend the shape 6-7-8-43 and mark 46

$$43-46 = 5 \text{ cm}$$

Draw a line from 46 parallel to 43-44

$$46-47 = 1.5 \text{ cm}$$

Extend the shape 42-44 to 47



Hip pocket jetting refer Ex 14.13

Side pocket jetting refer Ex 14.13

Flap

Belt carriers

0-1 = 5.5 cm square out horizontally and vertically from 0

0-2 = 1.5 cm square out from 1 square down from 2 and mark 3

Waist band

Square out horizontally and vertically from 0

Square out from 1

$$0-1 = 4 \text{ cm}$$

$$0-2 = 2-3 = W/4$$

$$3-4 = H/8$$

square down from 2,3,4 and mark 5,6 and 7

$$1-8 = 0.5 \text{ cm}$$

Join 7-8 square down from 1

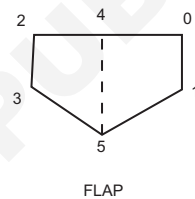
$$1-9 = 4 \text{ cm}$$

$$9-10 = 10-11 = W/4$$

$$11-12 = H/24$$

square up and mark 13 join 7-14

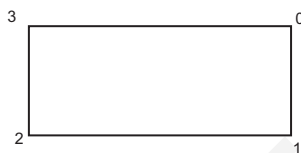
$$1-14 = 0.5 \text{ cm}$$



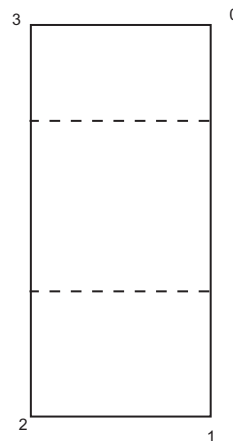
FLAP



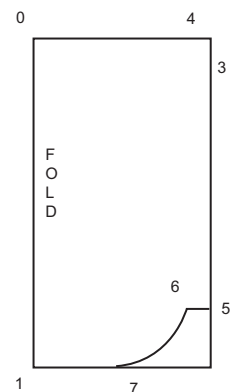
BELT CARRIER



HIP POCKET JETTING



HIP POCKET POUCH (LINING)



SIDE POCKET POUCH

Jetting for hip pocket

$$0 - 1 = 5 \text{ cm}$$

$$1 - 2 = 30 - 31 + 2 \text{ cm}$$

Square out horizontally and vertically from 0.

Square upto 3

Jetting for side pocket

$$0 - 1 = H/6 + 4 \text{ cm}$$

Square out vertically and horizontally from 0

Square down from 2 and square out from 1 and mark 3.

Flap

$$0 - 1 = 3.5 \text{ cm}$$

$$0 - 2 = H/8$$

$$2 - 3 = 0 - 1$$

$$0 - 4 = 1/2 \text{ of } 0 - 2$$

$$4 - 5 = 5 \text{ cm}$$

Square out horizontally and vertically from 0

Square down from 2

Square down

Join 1-5 and 5-3

Hip pocket pouch

$$0 - 1 = H/3 + H/12$$

$$1 - 2 = 30 - 31 + 5 \text{ cm}$$

Square out horizontally and vertically from 0

Square up from 2 and mark 3

Side pocket pouch

$$0 - 1 = H/3 + 5 \text{ cm}$$

$$1 - 2 = H/6 + 2.5 \text{ cm}$$

$$3 - 4 = 2.5 \text{ cm}$$

$$2 - 5 = H/12$$

$$5 - 6 = 1 \text{ cm}$$

$$2 - 7 = 1/2 \text{ of } 2 - 1$$

Square out horizontally and vertically from 0

Square up and mark point 3

Join 4-5, square out from 5

Shape 6 - 7

Pattern cutting

Cut the drafted paper pattern of pleated trousers along the following cutting lines, leaving enough space around preparing the master pattern.

Front -> 0-21-11-2-18-16-14-15-17-5-3-7-19-22-23-24-20-0

Back -> 32-21-11-2-18-16-14-15-27-26-31-28-30-33-32

Fly -> 40-42-45-4-44-43-8-7-6-40

Waist band -> 0-8-7-6-13-5-4-0-14-9-10-11-12-13-7-14

Hip pocket jetting	->	0-1-2-3-0
Side pocket jetting	->	0-1-3-2-0
Flap	->	0-1-5-3-2-4-0
Belt carrier	->	0-1-3-2
Hip pocket pouch	->	0-1-2-3-0
Side pocket pouch	->	0-4-5-6-7-1

TASK 2 : Prepare master pattern

- 1 Add the following allowances to the cut paper pattern for seams, hems, interns, opening etc.

Instructions for master pattern

Original material

Front and back	
Bottom turning	7 cm
Side and inside leg seam	1 cm
Waistline	1 cm
Fly line on back	0.75 cm
Top of back seat seam	2.5 cm taper to 1 cm at crotch

Waist band

All three sides	1 cm
Centre back	2.5 cm
Fly	0.75 cm all around
Jetting	1 cm all around
Flap	0.75 cm all round
Belt carrier	0.50 cm all around

Lining material

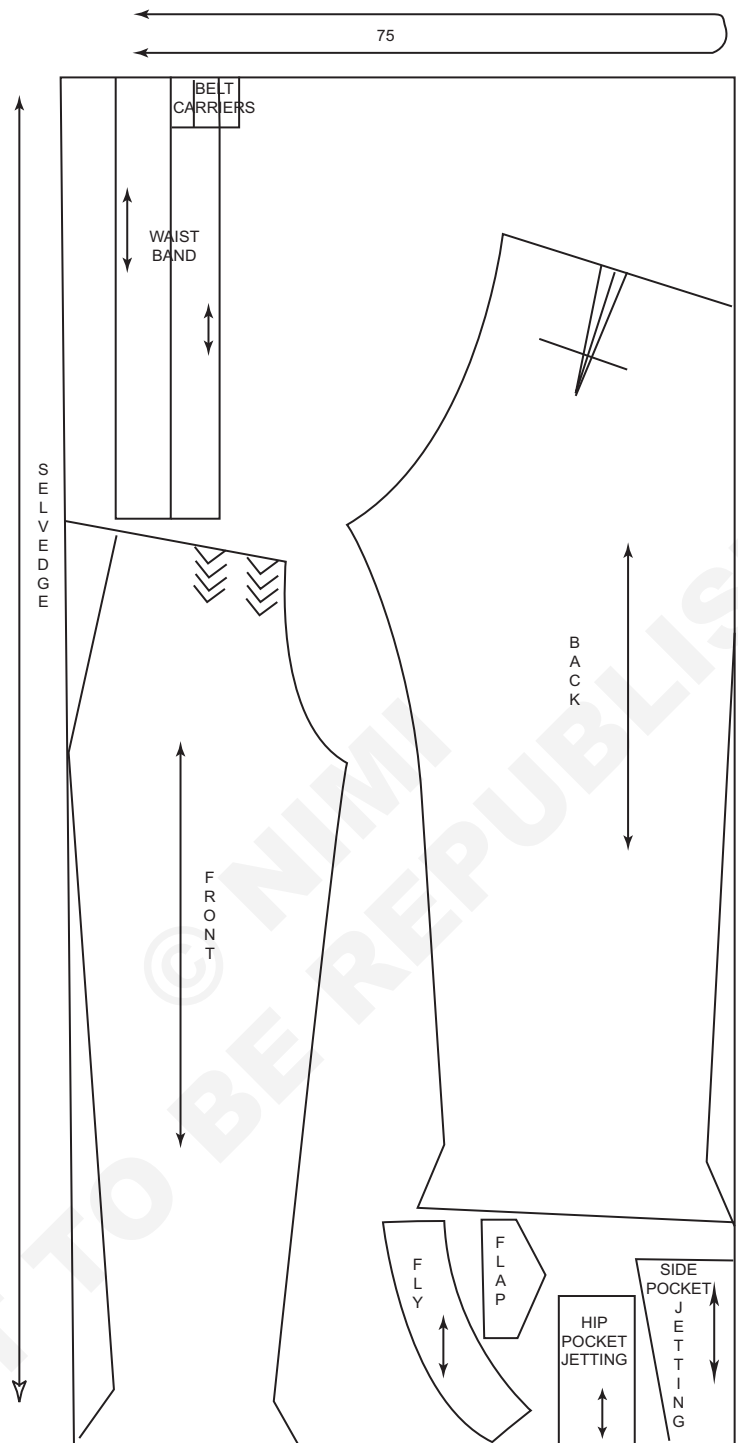
Pocket pouches	1 cm all around
Hip pocket pouch	1 cm all original
Fly	as per original
Fly shield	1.5 cm inner edge 0.75 cm all other edges

- 2 Cut the excess brown sheet after adding the master pattern allowances to each paper pattern.
- 3 Name the patterns with their measures for future reference.

TASK 3 : Lay and cut the required fabric components

- 1 Lay out double width fabric open on the cutting table with right side facing.
- 2 Fold the fabric width wise into equal halves, the width to measure 75 cm.
- 3 Spread and arrange the master pattern of pleated trousers as required.
- 4 Check for the grain lines, numbers of components required.
- 5 Mark the outline of the patterns using a marking chalk.
- 6 Similarly lay the lining material open on the cutting table.
- 7 Arrange and mark the outline of both the pockets pouches fly and fly shield.
- 8 Remove the patterns.
- 9 Cut the marked components using a sharp pointed scissors.
- 10 Cut notches at pocket markings, inturns etc.
- 11 Fold and tie all the pleated trousers components together, to prevent from missing.

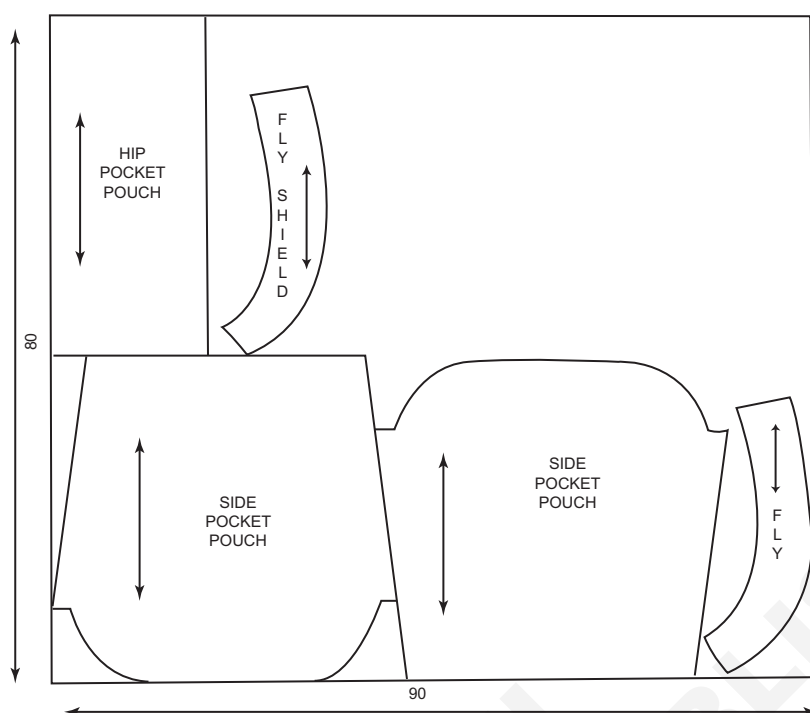
Fig 3



CUT COMPONENTS

ORIGINAL MATERIAL		HIP POCKET JETTING	2
FRONT	2	SIDE POCKET JETTING	2
BACK	2	FLAP	2
FLY	2	BELT CARRIERS	6
WAIST BAND	4		
(2 for lining)			

Fig 4



**CUT COMPONENTS
LINING MATERIAL**

SIDE POCKET POUCH	2
HIP POCKET POUCH	1
FLY	1
FLY SHIELD	1

MG14BHG

TASK 4 : Construct the gent's pleated trouser

Style features

- Pleated front part
- Dart at back
- Saint pocket
- Hip pocket
- Zip fly
- Two - piece waist band

Materials and trimmings

- Cut components of pleated pant
- 0.10X0.90 m buckron/tetron
- 1 zip, 20 cm
- 2 sets pant hook and eye
- 1 button
- Matching colour sewing thread
- Machine needle no.18

PROCEDURE

The cut components of pleated trousers are

Front	2	Hip pocket jetting	2
Back	2	Side pocket jetting	2
Fly	2	Flap	2
Waist band	2	Belt carriers	6
W.band for lining (original)	2		

(Lining material)

Side pocket pouch 2

Hip pocket pouch 1

Fly 1

Fly shield 1

- 1 Prepare the slant pockets on the marks in front sides (SS.No.1)
- 2 Set the knife pleats in front on marks and baste them fold of pleat should be directed towards the pocket.
- 3 Stitch the darts on marks at the back side. Press and set towards seat seam line.
- 4 Prepare hip pocket with flap on right side of the back. (SS.No.2)
- 5 Prepare the zip fly (SS. No 3)
- 6 Join sides of front and back, with
- 7 Prepare the belt and attach on waist line. (SS.No 4)
- 8 Stitch the inside leg seam joining front and back together.
- 9 Stitch crotch from back to front up to the zip fly forming cross seam at the joint of seam lines.

10 Lock at the end of fly from right side, making a triangle of 0.5 cm with double row cliff stitching.

11 Clip crotch seam allowance on the shaped portion in diagonal direction up to 5 mm. Press it open and set flat by stretching. Stitch self bound seam on seam allowance. Press and finish at the top with hemming.

12 Inside the set sew the edges of lower end of the shield lining to crotch seam allowances. Be careful, stitches should not be visible on front side.

13 Prepare five belt carriers(SS.No.5).Fix one belt carrier on the waist band above each front pleat, one on back centre seam and one in center between centre seam and pleat.

14 Finish the bottom line with broad hem.

Fix and stitch one pant hook in the centre of the extended edge at waist band on the wrong side. Fix another hook on waistband above the zip fly on wrong side. Be careful that the edge of hook and stitches are not visible from front side.

15 Fix eyes on the other side of waist band (matching with the position of the hooks).

16 Trim the threads, finish and press.

Gents Trouser - Style II

Objectives: At the end of this exercise you shall be able to

- draft and stitch jeans
- prepare front hip pocket
- finish waist line with waist band in front and fold-down casing in back.

Fig 1

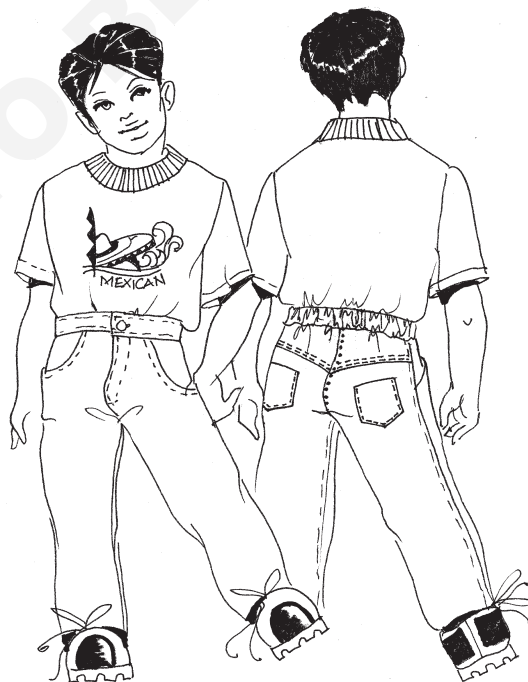
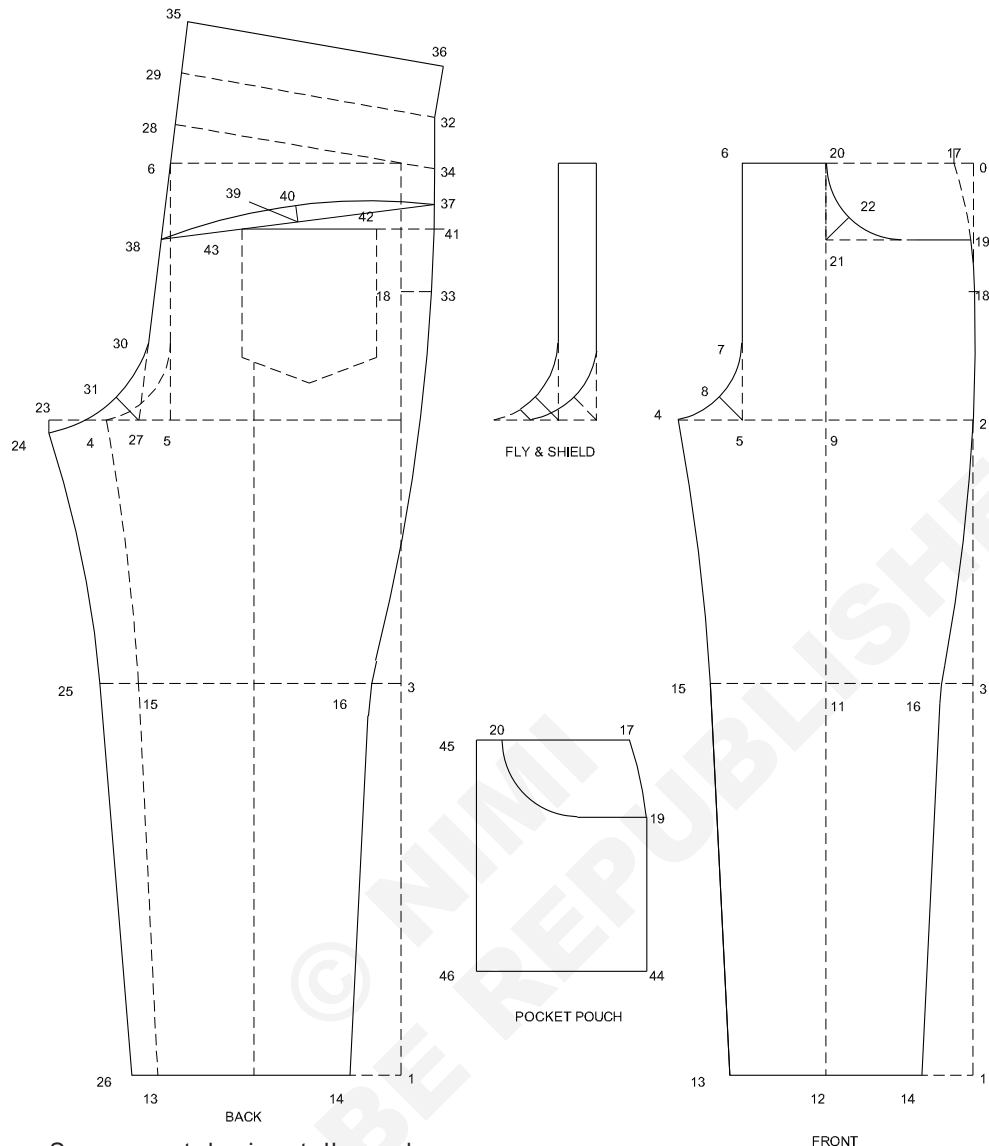


Fig 2

INSTRUCTIONS FOR DRAFTING



Front

Square out horizontally and vertically from 0

0-1 = FL - waist band
 0-2 = H/3 - waist band
 1-3 = 1/2 of 2-1+5 cm
 2-4 = H/3 - 1 cm
 4-5 = H/12 - 1 cm

Square out from 2,3,1

Square up from 5 and mark 6
 Join 6-0

5-7 = H/12
 5-8 = 1/2 of 4-5

Divide angle 7-5-4 and mark 8
 Shape 6-7-8-4

Mark 9 at centre of 4-2
 Square up and down from 9 and mark 10, 11, 12

12-13 = 12-14 =
 RB/4 - 0.5 cm
 11-15 = 11-16 =
 RB/4 + 1 cm

Join 13-15 and 14-1

Shape 4-15

Mark 18 in centre of 0-2
 Shape 17-18-2-16 (side leg shape)

Square up from 19
 Square down from 20 and mark 21,
 divide angle 20-21-19
 Shape 20-22-19

6-17 = W/4

17-19 = H/12
 17-20 = H/8 + 1 cm

21-22 = 2.5 cm

Back

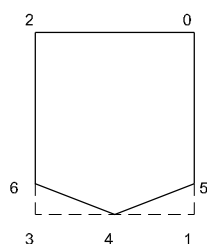
4-23 = H/16
 23-24 = 1 cm
 15-25 = 3 cm
 13-26 = 2 cm

5-27 = 1/2 of 4-5
 6-28 = H/24
 28-29 = 4 cm
 27-30 = 1/3 of 6-27
 27-31 = 1/2 of 23-4
 29-32 = W/4 + 5 cm
 18-33 = 2.5 cm
 29-35 = 4 cm
 35-36 = 28-34
 34-37 = H/24
 28-38 = H/8
 38-39 = 1/2 of 38-37
 39-40 = 1 cm
 37-41 = 2 cm
 41-42 = H/24 + 1.5 cm
 42-43 = H/6 - 1.5 cm

Copy the front drafting as guide
 Square down from 23

Join 25-26, shape 24-25 (inside leg length)
 Join 27-6 and extend
 Join 28-0
 Draw a line from 29 parallel to line 28-0
 Divide angle 30-27-23
 Shape 29-6-30-31-24
 Square out from 18
 Shape 32-33-16 and mark 34
 Draw a line from 35 parallel to 29-32
 Shape 36-32 (draw image of 32-34)

Join 37-38
 Square up from 39
 Shape 38-40-37
 Draw a line from 41 parallel to 0-28
 (pocket mouth)



POCKET

Patch pocket (original material and lining)

$$0-1 = H/6$$

$$0-2 = H/6 - 1 \text{ cm}$$

$$1-4 = 1/2 \text{ of } 1-3$$

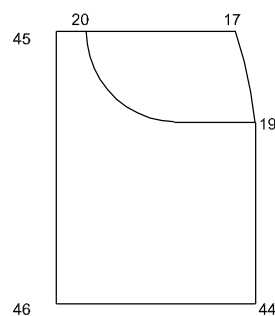
$$1-5 = 3-6 = 2 \text{ cm}$$

Square out horizontally and vertically from 0

Square out from 1

Square down from 2 and mark 3

Join 4-5 and 4-6



POCKET POUCH

Pocket pouch pieces

$$19-44 = H/6$$

$$20-45 = 2 \text{ cm}$$

Copy the front pocket mouth marking and continue:

Square out from 44

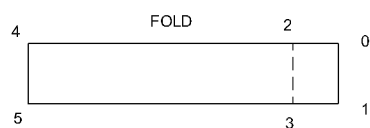
Square down from 2 and mark 46

17-44-46-45-20-17 is pocket pouch piece of original material

20-19-44-46-45-20 is pocket pouch of lining cloth

Fly and fly shield (ref.ex.32)

Waist band



WAIST BAND

$$0-1 = 4 \text{ cm}$$

$$0-2 = 3 \text{ cm}$$

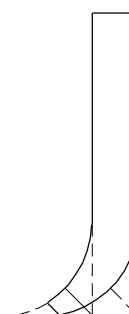
$$2-4 = W/4$$

Square out horizontally and vertically from 0

Square out from 1

Square down from 2 and mark 3

Square down from 4 and mark 5



FLY & SHIELD

Measurements	Material
Full length = 75 cm	0.90 x 1.36 m Drill/Denim cloth
Waist = 66 cm	0.25 x 0.45 m Lining
Hip = 72 cm	0.80 x 0.75 cm Elastic
Round bottom = 32 cm	1 zip, 18 cm
	1 button

INSTRUCTIONS FOR DRAFTING MASTER PATTERN

Front and back : 1 cm all around, except 1.5 cm seat seam and 3 cm for bottom turning

Yoke : 1 cm all around, except 1.5 cm on seat seam

Waist band : 1 cm all around

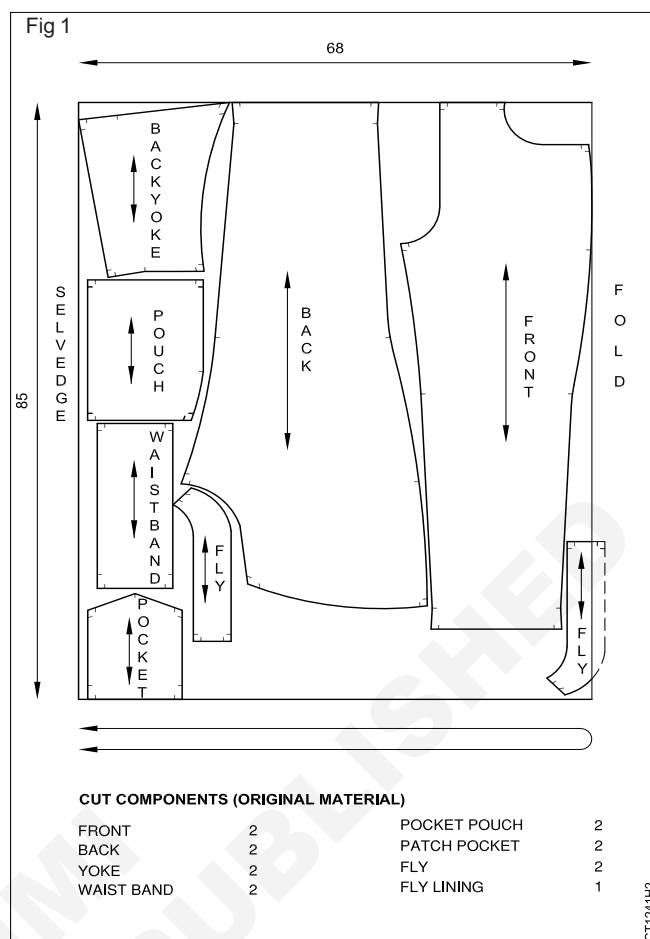
Fly : 1 cm all around

Pockets (patch pouch lining and original) : 1 cm all around, except 2 cm for patch pocket mouth

- 1 Prepare pattern as per instructions (front and back separately).
- 2 Prepare master pattern. (Fig 1)
- 3 Join back yoke to back panel.
- 4 Lay out paper pattern on cloth, mark and cut all components.

Note: The fly piece extending the fold line in layout is cut from single layer of cloth on unfolded material after all other components have been cut.

- 5 Transfer marks on both layers of front and back part.
- 6 Mark and cut pocket pouch lining pieces from Poplin as per instruction for drafting.
- 7 Prepare front hip pocket.
- 8 Prepare zippered fly using fly shields of original material.
- 9 Join back yoke to back panel.
- 10 Turn the seam allowance of lower edge of yoke on the wrong side of fabric and press. Set the folded edge over the seam allowance of upper edge of back part matching side and centre back line, baste and stitch 2 mm away from folded edge. Make another row of stitches 0.75 cm away from the 1st row. Remove basting.
- 11 Prepare back patch pockets and fix on the marked position.
- 12 Join seat seam leaving 4 cm from crotch/fork end. Make double row of stitches on the right side placing seam allowance on left back part.
- 13 Prepare waist band with fusing material.
- 14 Attach waist band from wrong side and make side seam. Insert elastic in fold-down casing.
- 15 Join inside leg of front and back.
- 16 Stitch the left out portion of front and back crotch and



make double stitches in continuation of seat seam up to fly end. Tack firmly on fly end and side end of pocket mouth.

- 17 **Turn and finish bottom hem:** Turn the bottom edge 0.75 cm on the wrong side of fabric. Then turn once again the hem portion on the wrong side of fabric, baste and finish the hem by two rows of stitches, keeping 0.75 cm distance between two rows.
- 18 Make one button hole on waist band and tack button.
- 19 Neaten the thread ends and press the jeans.

Hip pocket

Objective: This shall help you to

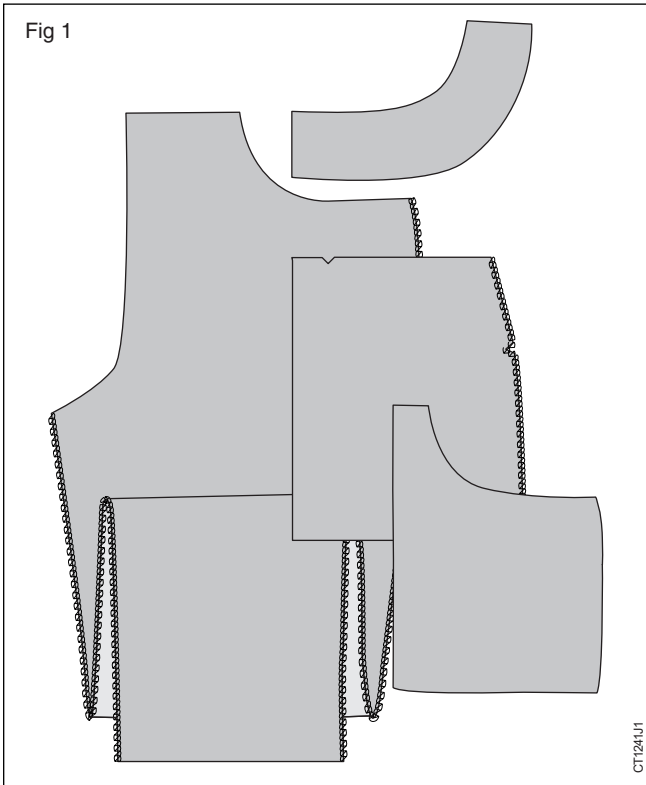
- prepare front hip pocket on jeans.

- 1 Cut 2 jetting pieces 4 cm wide (including seam allowance from the balance material as per the shape of pocket mouth)
- 2 Overlock the defined edges of pieces. (Fig 1)
- 3 Take overlocked front part of jeans, both the pocket pouch pieces (one from lining material and other from original material) and one jetting piece.
- 4 Mark a line 1 cm away from lower round edge of jetting piece. Cut notches in the curved portion and turn it on

wrong side by 1 cm. Baste and press gently and stitch 0.7 cm away from folded edge. (Fig 2)

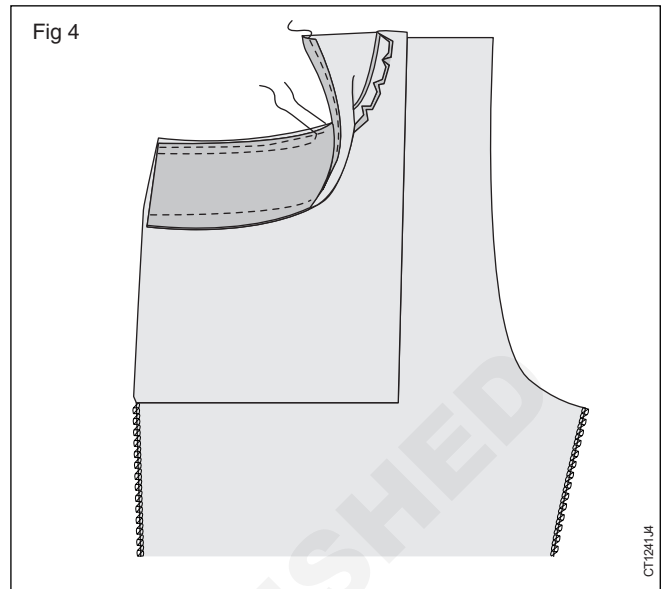
- 5 Place the pocket pouch lining piece on the wrong side of front part along the pocket mouth, right side of lining with wrong side of front together. Then place the jetting piece over front piece matching pocket mouth and right sides. Baste along the pocket mouth and stitch. Remove basting. (Fig 3)

Fig 1



- 6 Cut notches on the seam allowance and turn the jetting piece on the wrong side over the pocket pouch piece. Set the seam pushing the edge inside by 2 mm and press. (Fig 4)

Fig 4



- 7 Stitch on the pocket mouth from right side, 2 mm away from the edge. Make a parallel seam maintaining distance (gauge) of 0.75 cm. (Fig 5)

Fig 2

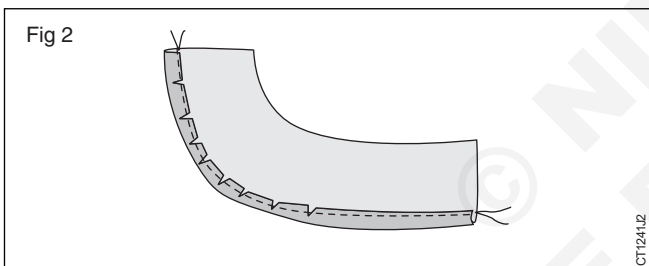


Fig 3

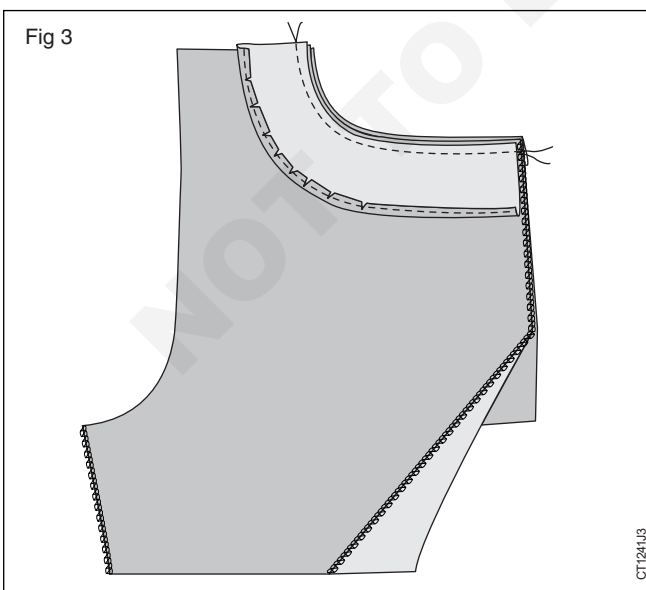
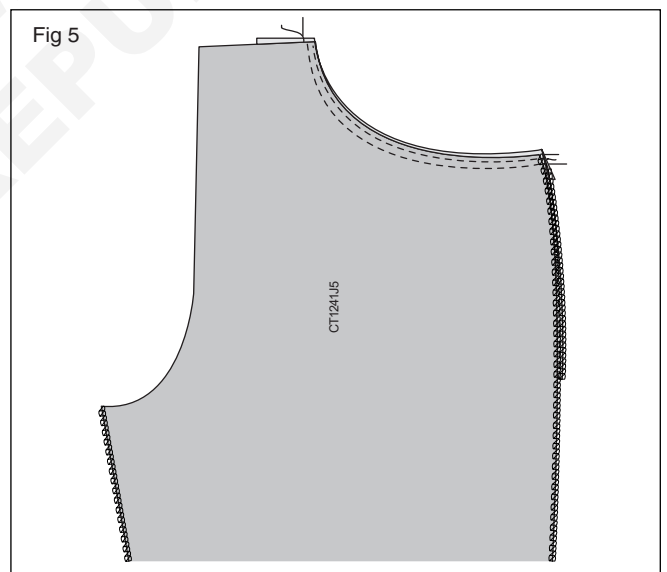
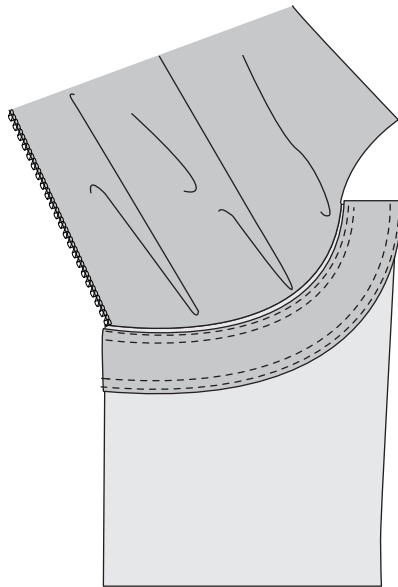


Fig 5



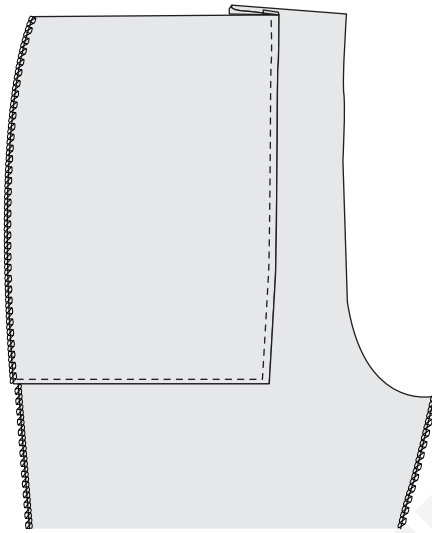
- 8 Spread the pocket pouch away from the body part, lay flat the jetting piece over it and stitch the lower edge of jetting with the pocket pouch. (Fig 6)
- 9 Take the pocket pouch of original material and place it under the lining pocket pouch, right side of lining material with the wrong side of original material together. Match the longer sides. Baste on the longer side and bottom of the pieces. Stitch at a distance of 0.75 cm from the edge. (Fig 7)
- 10 Remove basting and turn the pocket pouch bringing right side out. Set the seam and press. Stitch along the edge leaving 0.75 cm. (Fig 8)

Fig 6



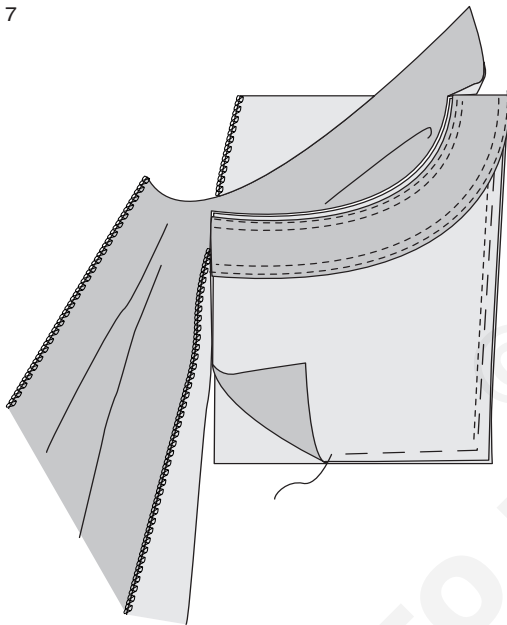
CT1241JB

Fig 8



CT1241JB

Fig 7

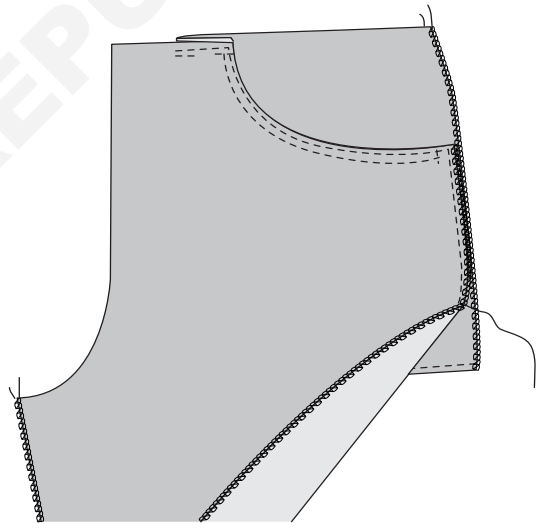


CT1241JB

- 11 Lay the front of jeans with right side up and place the pocket pouch under it matching sides and top. Baste and stitch with machine on waist, line and side at a distance of 0.5 cm from the edge. (Fig 9)

Note: Take care that the pocket mouth opening is kept in right place on marks.

Fig 9



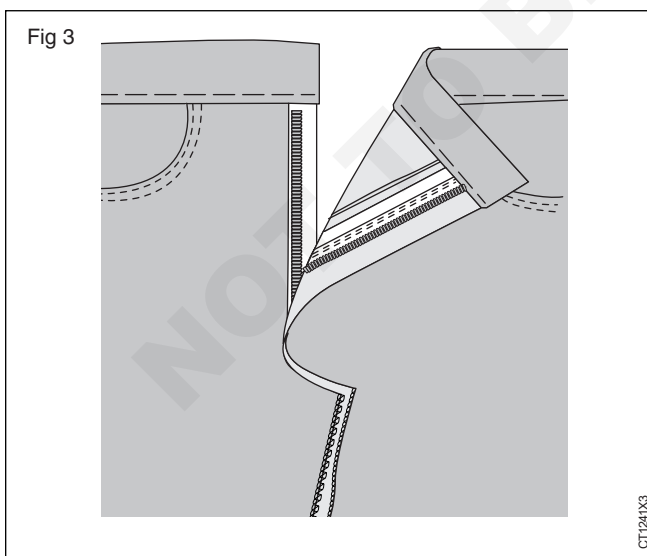
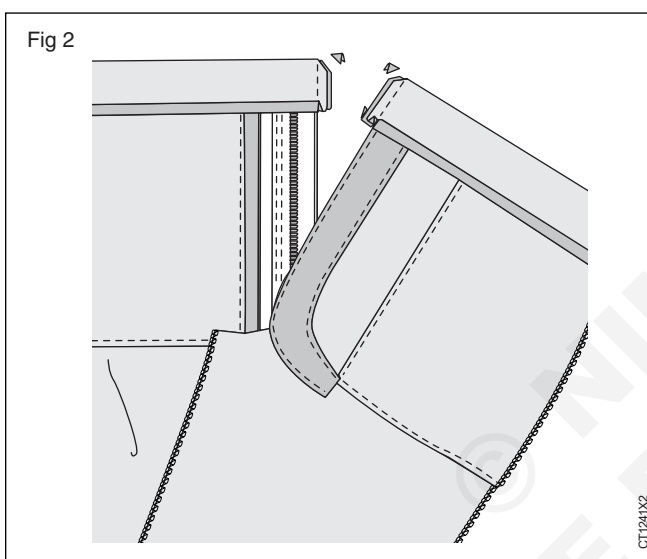
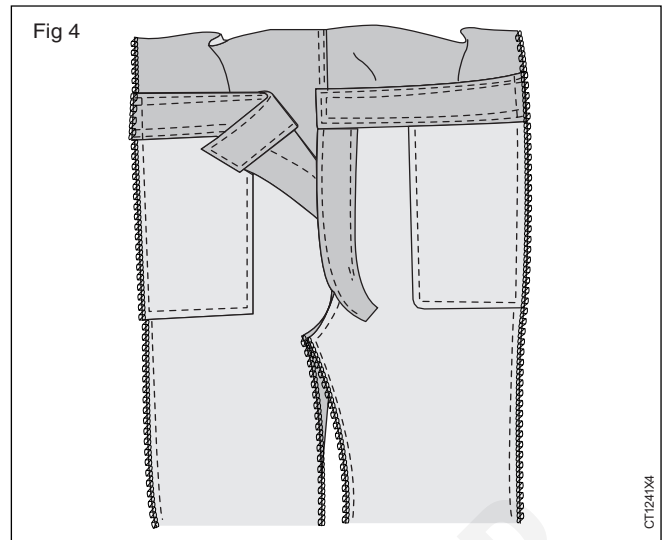
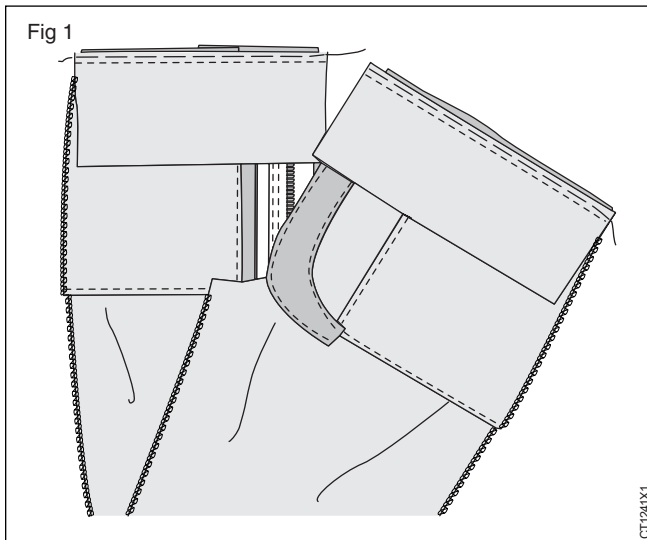
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Waist band finish

Objective: This shall help you to

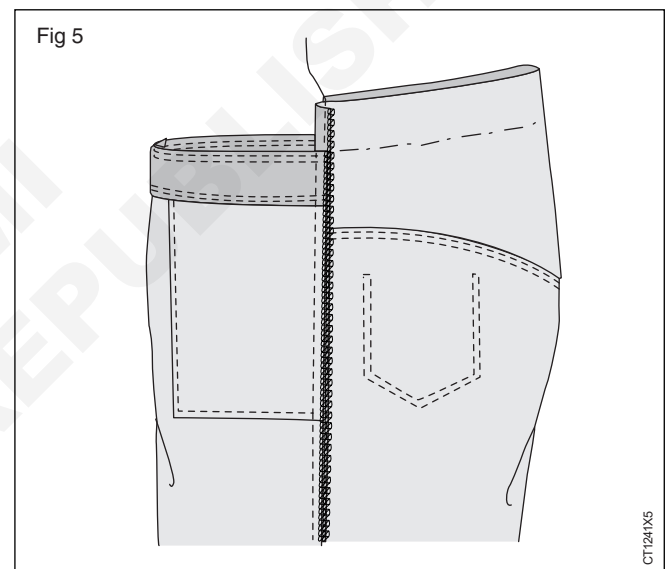
- prepare waist band and stitch side seam of jeans.

- 1 Place the waist band on the waist line of front part right side of waist band and wrong side of front jeans together. Seam allowance of waist band will extend by 1 cm on both sides at centre front. Baste and stitch on the seam allowance mark. Remove basting. (Fig 1)
- 2 Fold the waist band on its centre mark, right sides together. Stitch on the seam allowance of centre front. Trim off the corner to reduce bulk. (Fig 2)
- 3 Turn the waist band with right side out and pull out the corner neatly. (Fig 3)

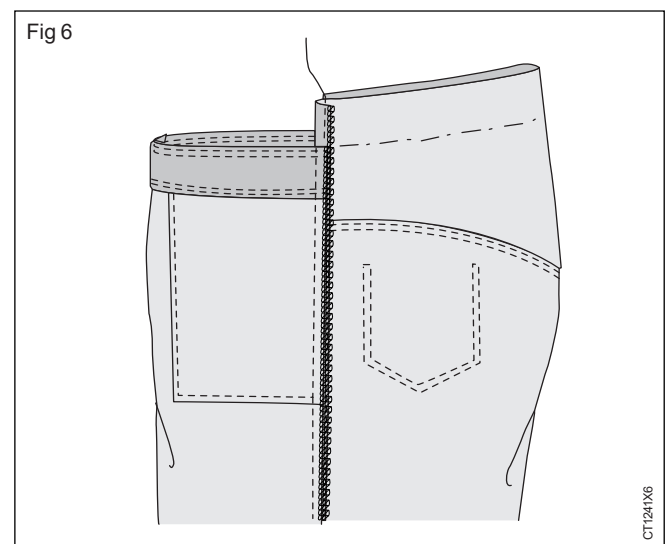


4 Match and stitch side seams of front and back component right sides together. Stitch also inside leg length and crotch line. Overlock all seam allowances. (Fig 4)

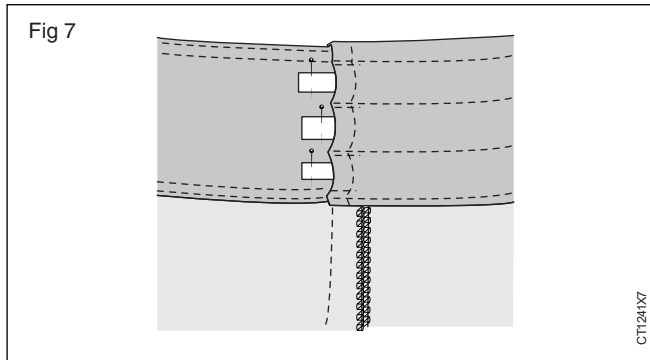
5 Press side seam allowance towards back component, and stitch it on the edge from top of back up to waist band of front. (Fig 5)



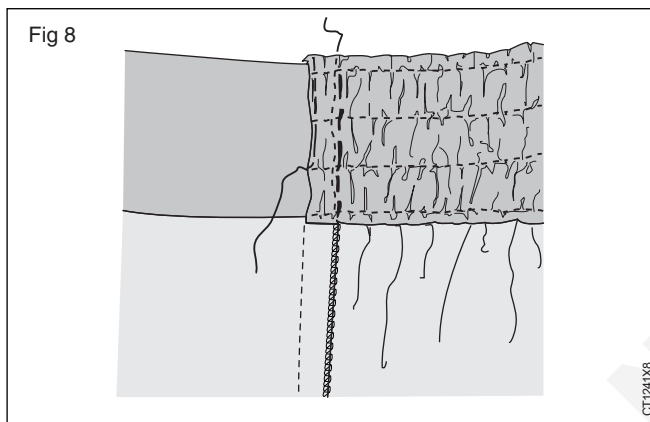
6 Prepare fold down casing of back. Set three rows of stitches: Keep 0.5 cm from top and divide the remaining portion into three equal parts for two more rows of stitches. (Fig 6)



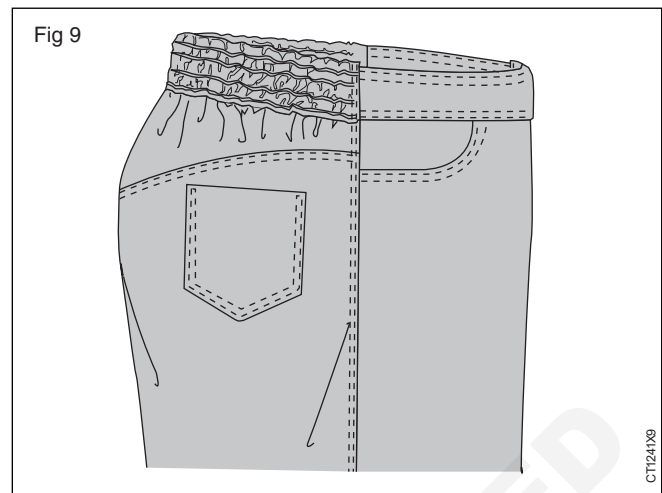
- 7 Insert elastic (formula for calculation: ref.Ex.31) and fix with pins. (Fig 7)



- 8 Fix elastic by basting at a distance of 1 cm. Remove pins and trim edges of elastic. Baste again on the edges. (Fig 8)



- 9 Turn the garment with right side out and stitch a parallel row of stitches on side seam. (Fig 9)



Press and fold checking the fitting of garment

Objectives: At the end of this exercise you shall be able to

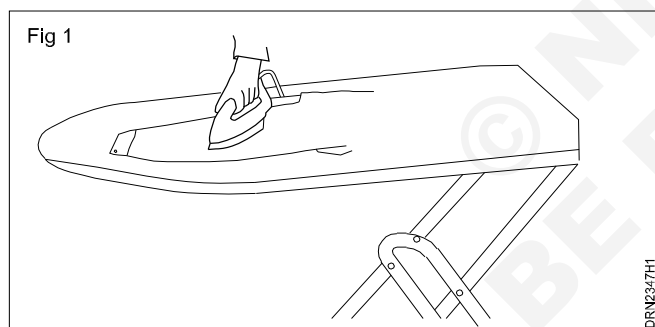
- **press and fold a shirt**
- **press and fold a trousers.**

Requirements	
Tools / Instruments	Materials
<ul style="list-style-type: none"> • Iron box & Pressing table - 1 No each. • Dummy (size should be matched with the size of the garments) 	<ul style="list-style-type: none"> • Shirt and trousers - 1 No each. • Sewn sari blouse and petticoat - 1 No each.

PROCEDURE

TASK 1 : Press and fold a shirt

- 1 Place the shirt on the pressing table.
- 2 Set the iron box with required heat.
- 3 Press the collar and shoulder portion.
- 4 Press the sleeve plackets, cuff.
- 5 Place the sleeves of the shirt in flat and press neatly. (Fig 1).

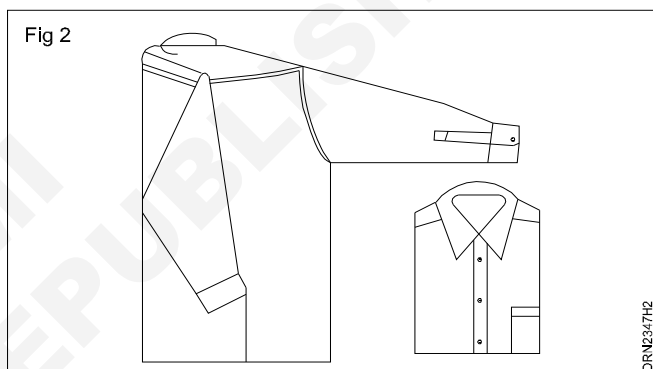


- 6 Press the back portions.
- 7 Press the front portion, pocket and plackets. Fasten all the buttons.
- 8 After pressing, Place the shirt on the table as the front portion is down and back portion is up.
- 9 Fold the shirt lengthwise on the middle portion of the CB line and Left side seam as shown in the Fig 2.
- 10 Keep the left sleeve inside the fold portion as shown in the above figure.
- 11 Then do the same for the right sleeve also.
- 12 Finally the fold the shirt at the widthwise through the half length middle line as shown in the figure.

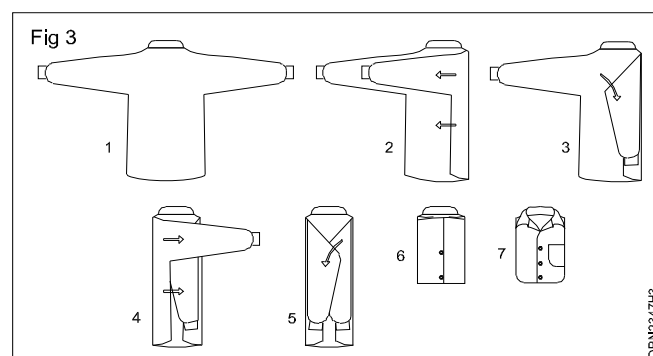
Folding of some basic garments

Folding of a basic shirt

- 1 **Stand up:** Collar is folded with body and situated at 90 degree angle. (Fig 2)

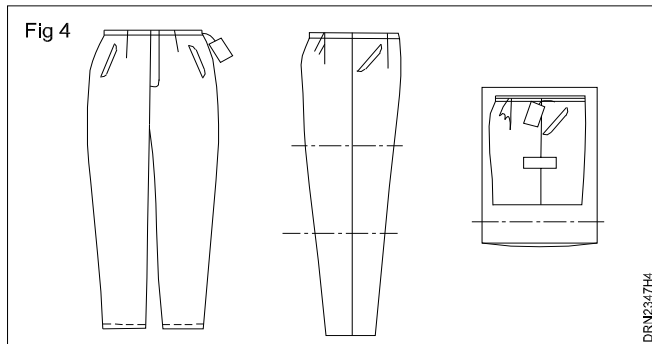


- 2 **Semi-stand up:** Collar is folded with body and situated at 45 degree angle.
- 3 **Flat pack:** Collar is spread as a whole on the body of shirt.
- 4 **Hanger pack:** Shirt is packed and transported by handing on the hanger. At the end of folding, garment are placed into a polythene packet, the size of polythene packet is permanent.



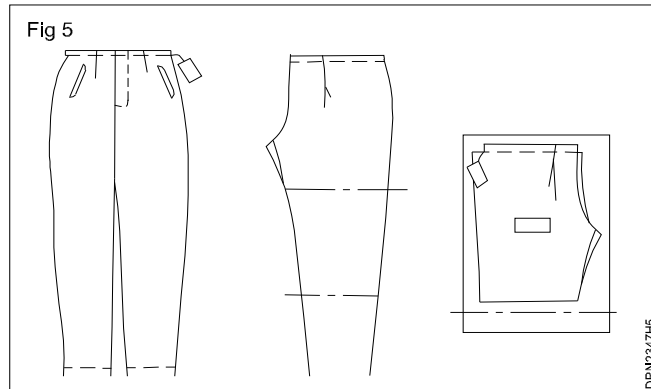
Pant folded side-to-side

- 1 Close zipper and waist buttons.
- 2 Fold pant in half, with inseam to out seam keeping ends of waistband to inside of pant.
- 3 Fold leg in thirds - fold bottom edge to above knee and fold up to waist edge. (Fig 4)



Pant folded front-to-back

- 1 Close zipper and waist buttons.
- 2 Fold pant front to back with fold at rise.

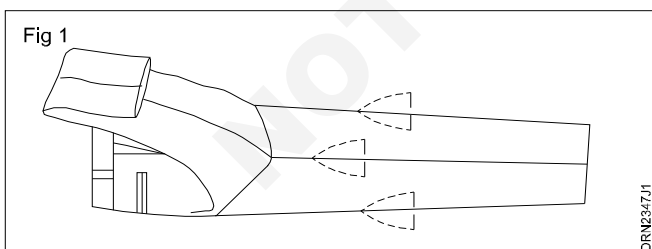


- 3 Fold leg in thirds - bottom edge to above knee and fold up to waist edge.

Processes	Procedure
Finishing Input	Here, sewn garments are received for finishing the garments.
Initial quality check	Sewn garments are checked here by the quality controller. If found major sewing problems then garments sent again to the sewing section for rectification
Spotremoving	Sometimes garments contain various types of spots which removes here carefully.
Ironing or pressing	It's one of the important processes in garment finishing. Here garments are ironed by following the measurement chart of those garments
Inspection	After completing ironing or finishing, garments are inspected again here by the quality controller to confirm the correct measurement of the apparel.
Hangtag attaching	In this section, the hangtag has to attach to the garments.
Folding	After completing all the above processes, garments are folded here.
Poly	Garments are poly-bagged here to keep the garments dust, dirt and other impurities free. send the garments safely to the buyer
Metal check	In this section, garments should be passed through a metal detector machine to identify metal lies in the garments.
Packaging or cartooning	Finally, all the garments should pack to send the garments safely to the buyer.
Inspection & Shipment	It's time to check the final inspection and then go for the dispatch shipment.

TASK 2 : Press and fold a trousers

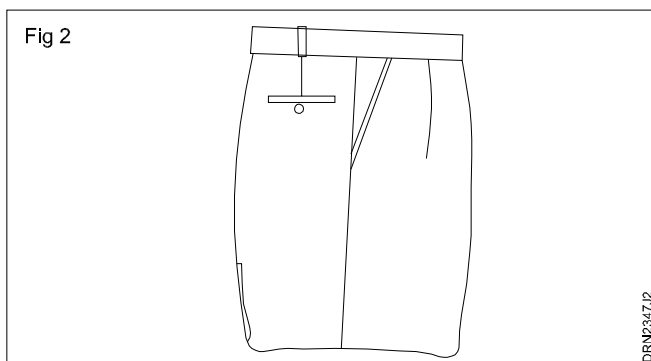
- 1 Set the trousers by holding it on its waist band and let the pocket pouch and legs hang straight and press it neatly. (Fig 1)



- 2 Hold the legs and match the inside seam and side seam of each leg and press.
- 3 Bring both legs together and press.

- 4 Set the placket opening flat in its place and press.
- 5 Make three folds on the length. (Fig 2)

Get the work checked by your Instructor.



Pattern grading of gents shirt

Objectives: At the end of this exercise you shall be able to

- grade a simple bodice front pattern
- grade the shirt patterns.



Scan the QR Code to view the video for this exercise

Requirements

Tools / Instruments

- 'L' square - 1 No.
- 1 Feet scale - 1 No.
- Metre scale - 1 No.
- Set square - 1 No.
- Measuring tape - 1 No.
- Pattern cutting scissors - 1 No.
- HB pencil - 1 No.
- Pencil eraser - 1 No.

- Blue ink pen - 1 No.
- Green ink pen - 1 No.
- Red ink pen - 1 No.

Materials

- Brown paper (90 GSM) - 8 Nos.
- Spec. sheet or Measurement chart for bodice pattern
- Shirt pattern set (M size) with spec. sheet

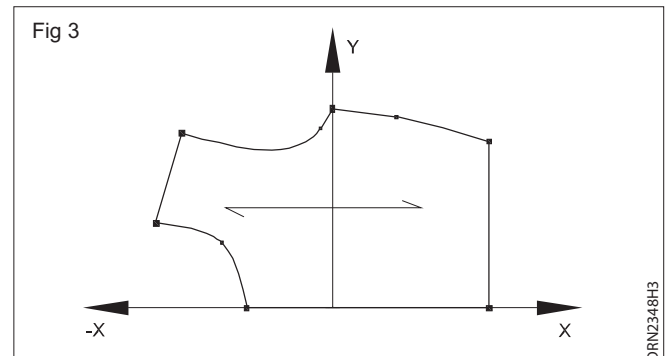
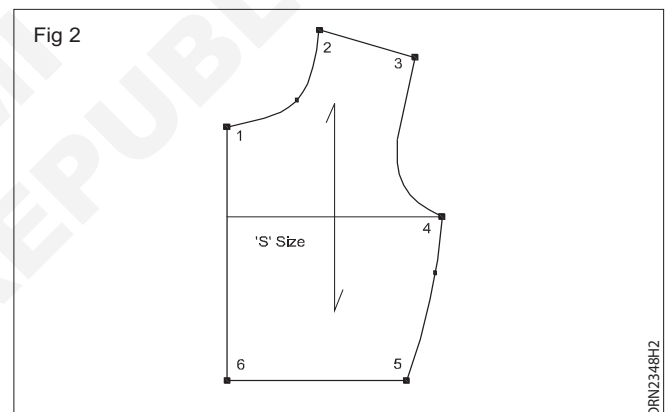
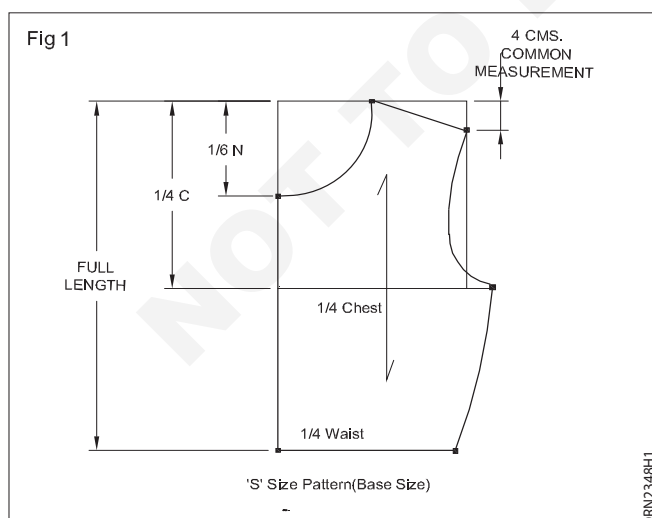
PROCEDURE

TASK 1 : Grade a simple bodice front pattern

1 Analyze the Spec. Sheet or measurement chart.

Sl.No	Measurements	S	M	L	XL
1	Length	42	44	46	48
2	Chart	100	104	108	112
3	Waist	80	84	88	92
4	Shoulder	38	40	42	44
5	Neck	36	39	42	45

2 With help of the Tools / Instruments and materials, prepare pattern for 'S' Size (or Base Size) as shown in the following figure. (Fig 1)



5 Calculate increments and prepare increment table.

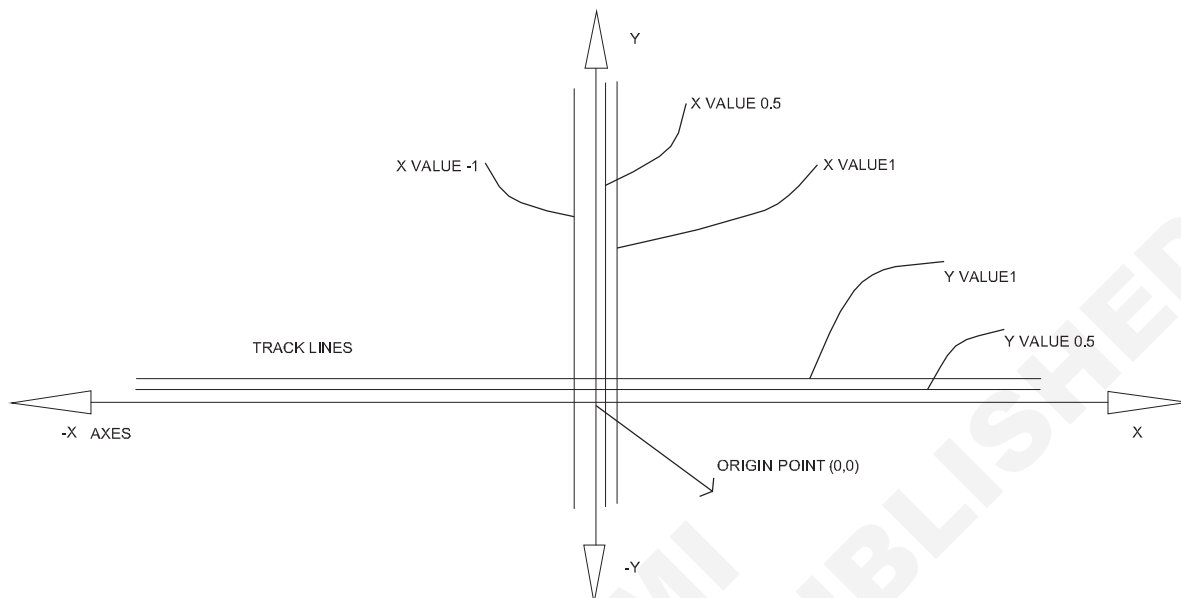
Point	S to M		M to L		L to XL	
	X	Y	X	Y	X	Y
1	0.5	0	0.5	0	0.5	0
2	-1	0.5	-1	0.5	-1	0.5
3	-1	1	-1	1	-1	1
4	0	1	0	1	0	1
5	1	1	1	1	1	1
6	1	0	1	0	1	0

3 Give notations to the pattern points to be graded. (Fig 2)

4 Draw pattern axes on the cut pattern using red ink pen and scale. (Fig 3)

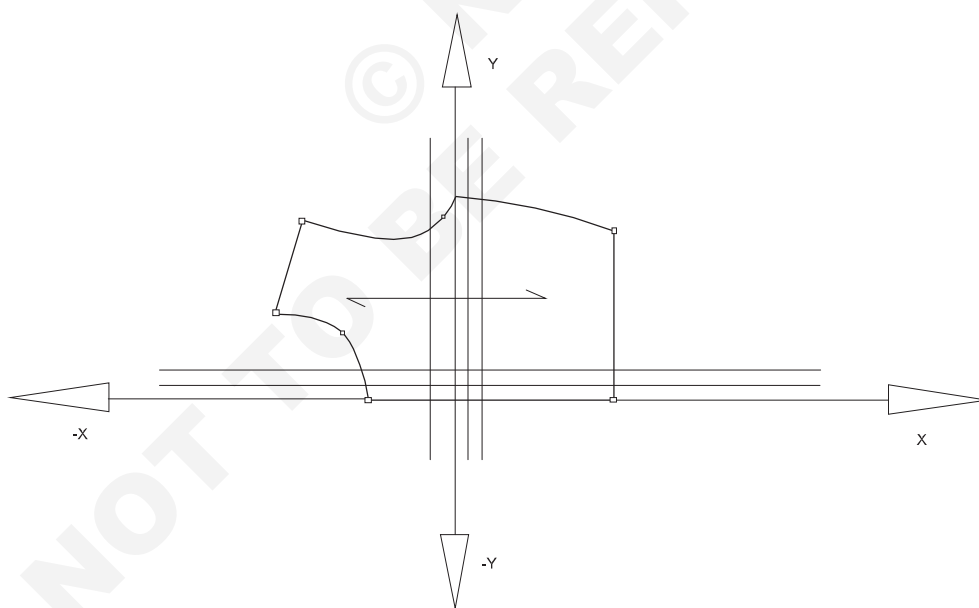
- 6 Take a brown paper in which the pattern to be graded and draw the axes, and mark the track lines based on the increment. Use different colour pens for track nearby for easy identification. (Fig 4)
- 7 Place the 'S' Size pattern on the paper by matching the origin points. (Fig 5)
- 8 Move the pattern on the increments line for both the x and y direction for point 1 and mark the end of the neckline and start of the CF line.
- 9 Return back the pattern to origin point on the paper.
- 10 Move the pattern on the increments line for both the x and y direction for point 2 and mark the start of the neckline and start of the Shoulder line.

Fig 4



DRN2348H4

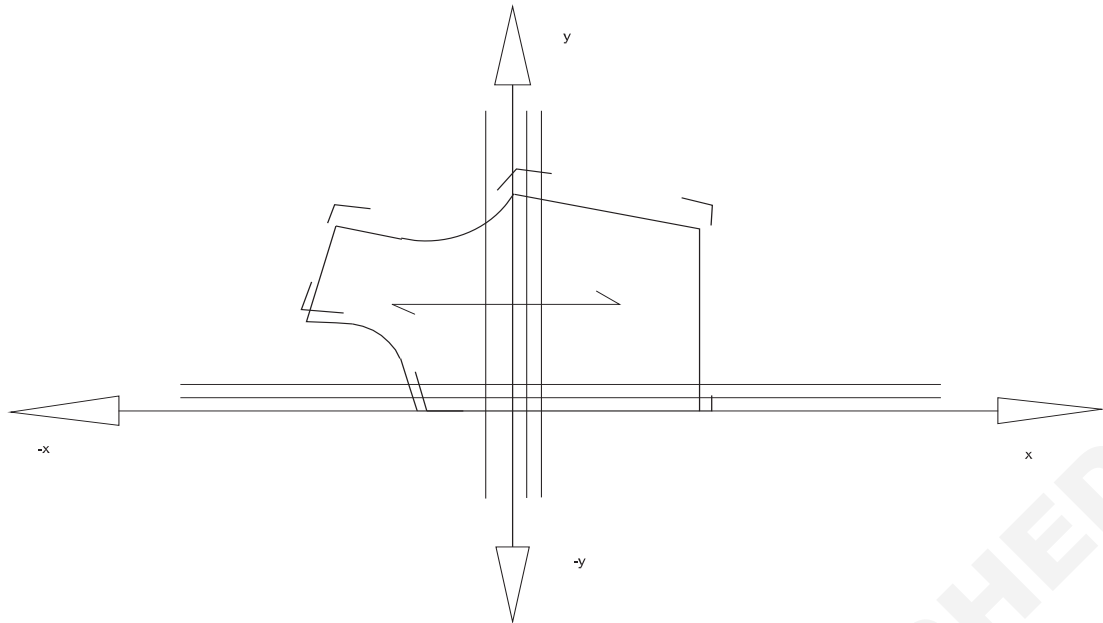
Fig 5



DRN2348H5

- 11 Return back the pattern to origin point on the paper.
- 12 Move the pattern on the increments line for both the x and y direction for point 3 and mark the end of the shoulder line and start of the armhole.
- 13 Return back the pattern to origin point on the paper.
- 14 Move the pattern on the increments line for both the x and y direction for point 4 and mark the end of the Armhole and start of the side seam line.
- 15 Return back the pattern to origin point on the paper.
- 16 Move the pattern on the increments line for both the x and y direction for point 5 and mark the end of the side seam line and end of the Waist line.
- 17 Return back the pattern to origin point on the paper.
- 18 Move the pattern on the increments line for both the x and y direction for point 6 and mark the start of the Waist line and end of the CF line. (Fig 6)

Fig 6

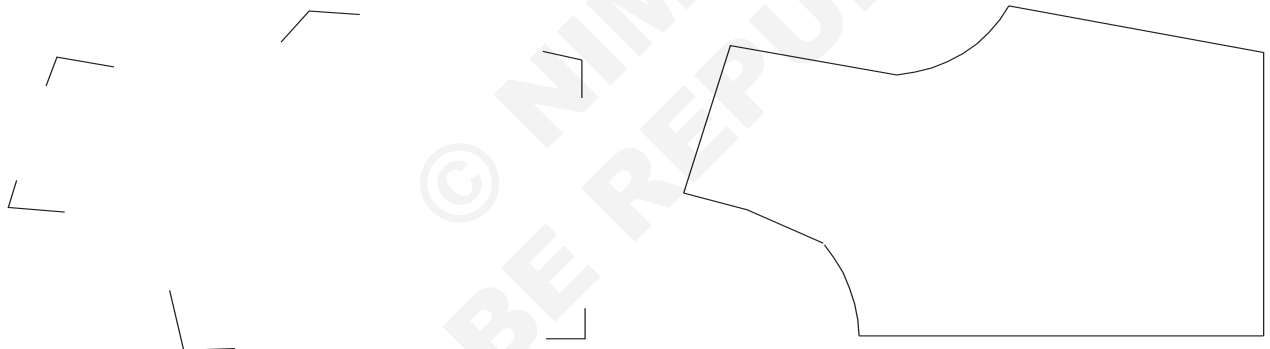


DRN2348H6

19 Remove the pattern from the paper, and join the graded portions with the help of scale (for straight lines) and base 'S' pattern (for curves). (Fig 7)

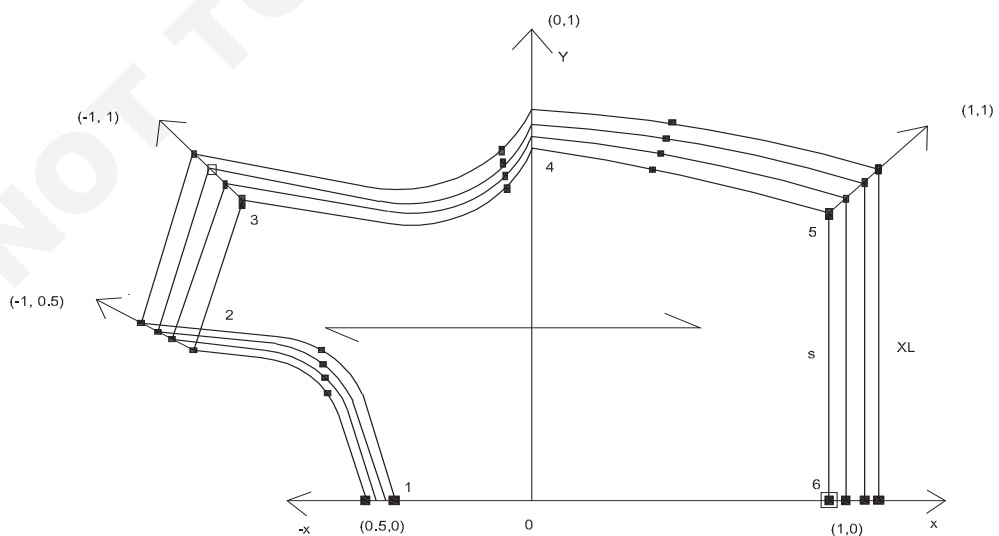
20 Do the same procedure for the remaining sizes for getting graded patterns for all the sizes as shown in the figure. (Fig 8)

Fig 7



DRN2348H7

Fig 8



DRN2348H8

TASK 2 : Grade the shirt patterns

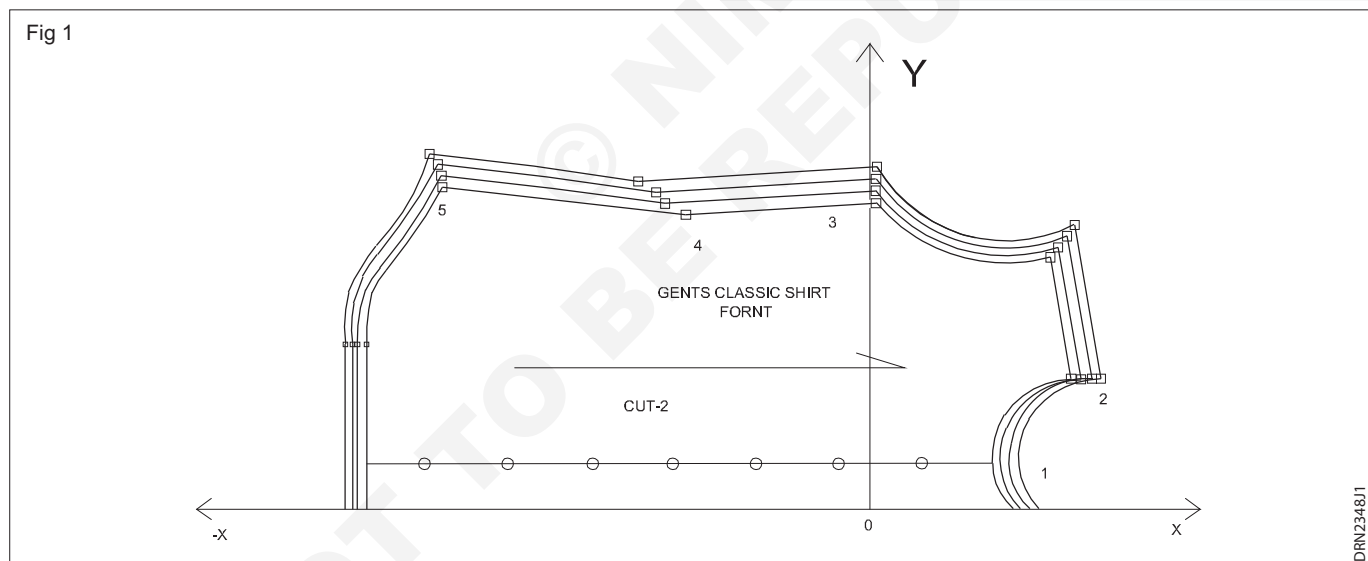
1 Analyze the spec.sheet or measurement chart.

Sl. No.	Measurements in Cms	S	M	L	XL
1	Neck	38	40	42	44
2	Chest	95	100	105	110
3	Armscye depth	23.75	25	26.25	27.5
4	Natural waist length	44	45	46	47
5	Half back	19	20	21	22
6	Full sleeve length	64	65	66	67
7	Shirt length	79	81	83	85
8	Cuff length	22	23	24	25
9	Cuff width	6	6	6	6
10	Pocket length	14.5	15.5	16.5	17.5
11	Pocket width	11	12	13	14
12	Pocket hem	3.5	3.5	3.5	3.5

- 2 Take the 'M' Size shirt patterns to be graded.
- 3 Give notations to the pattern points to be graded.
- 4 Draw pattern Axes on the cut pattern using red ink pen and scale.

- 5 Calculate increments and prepare increment table.
- 6 Grade the patterns by the method followed in TASK 1. (Fig 1 to Fig 7)

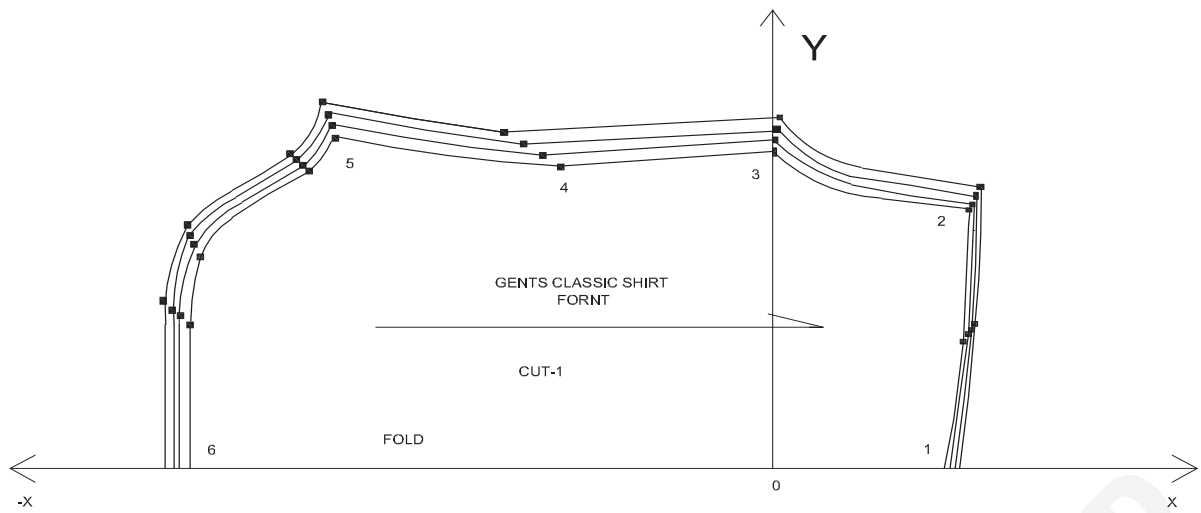
Get the work checked by your instructor.



Front grading

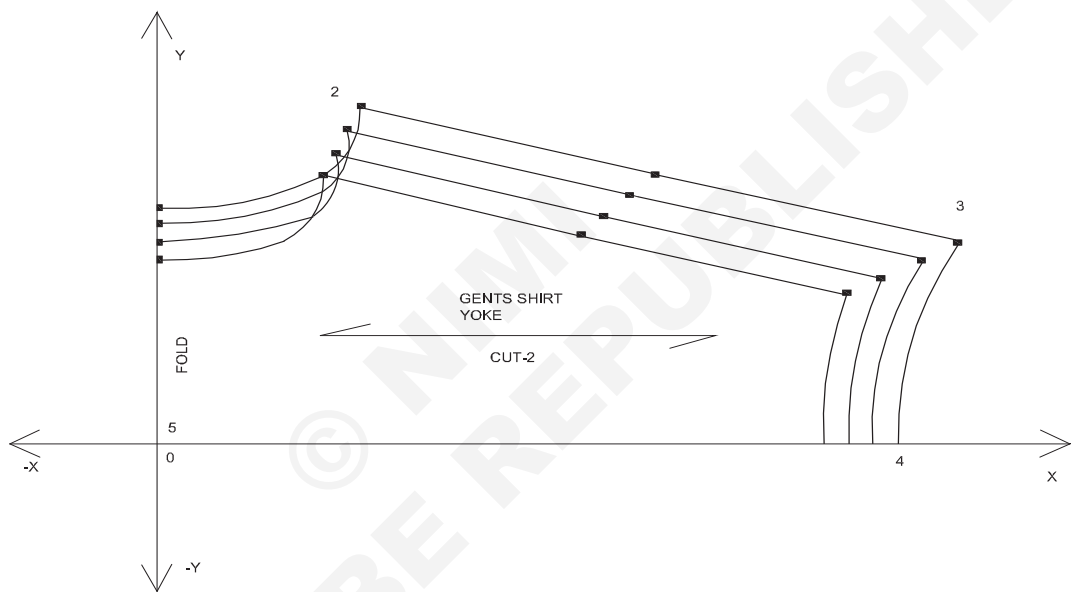
Sizes ----->	M to S		M to L		L to XL	
Point	X	Y	X	Y	X	Y
1	-0.85	0	+0.85	0	+0.85	0
2	-1.25	-0.4	+1.25	-0.4	-1.25	-0.4
3	-1.85	-1	+1.25	+1	+1.25	+1
4	0	-1.25	0	+1.25	0	+1.25
5	+1	-1.25	-1	+1.25	-1	+1.25
6	+0.75	-1.25	-0.75	+1.25	-0.75	+1.25
7	+0.75	0	-0.75	0	-0.75	0

Fig 2



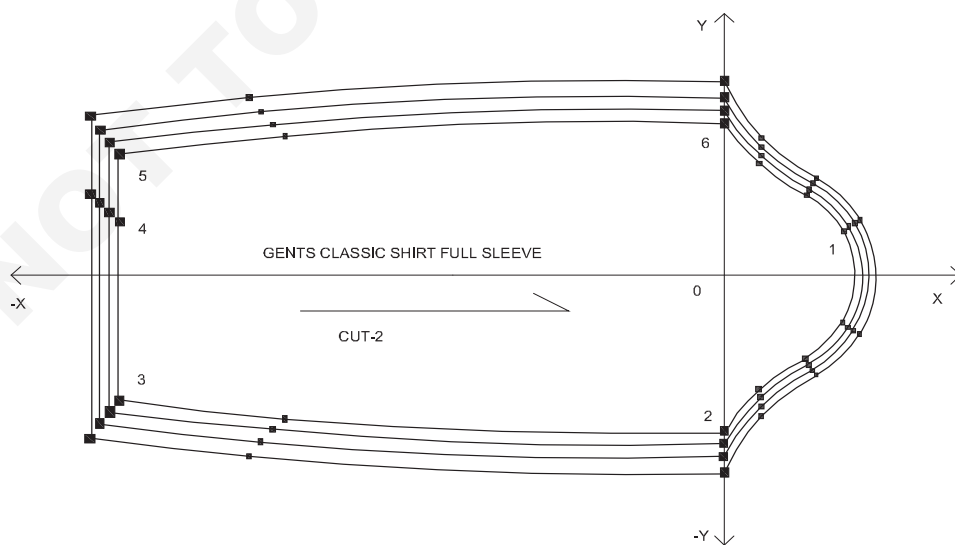
DRN2348J2

Fig 3



DRN2348J3

Fig 4



DRN2348J4

Fig 5

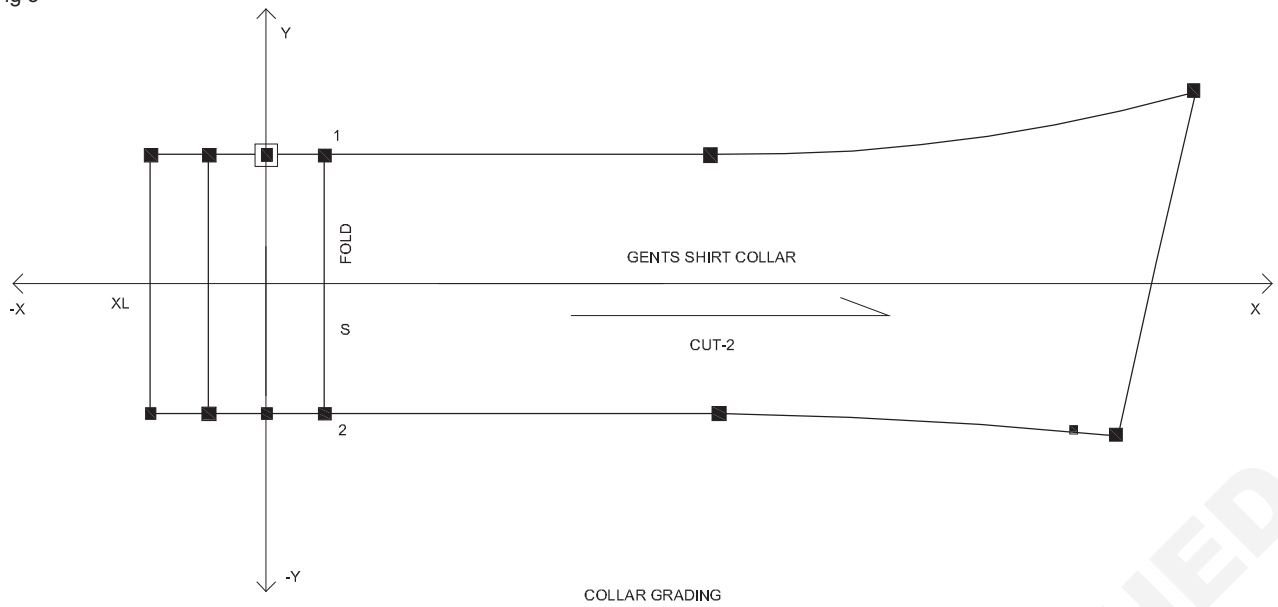


Fig 6

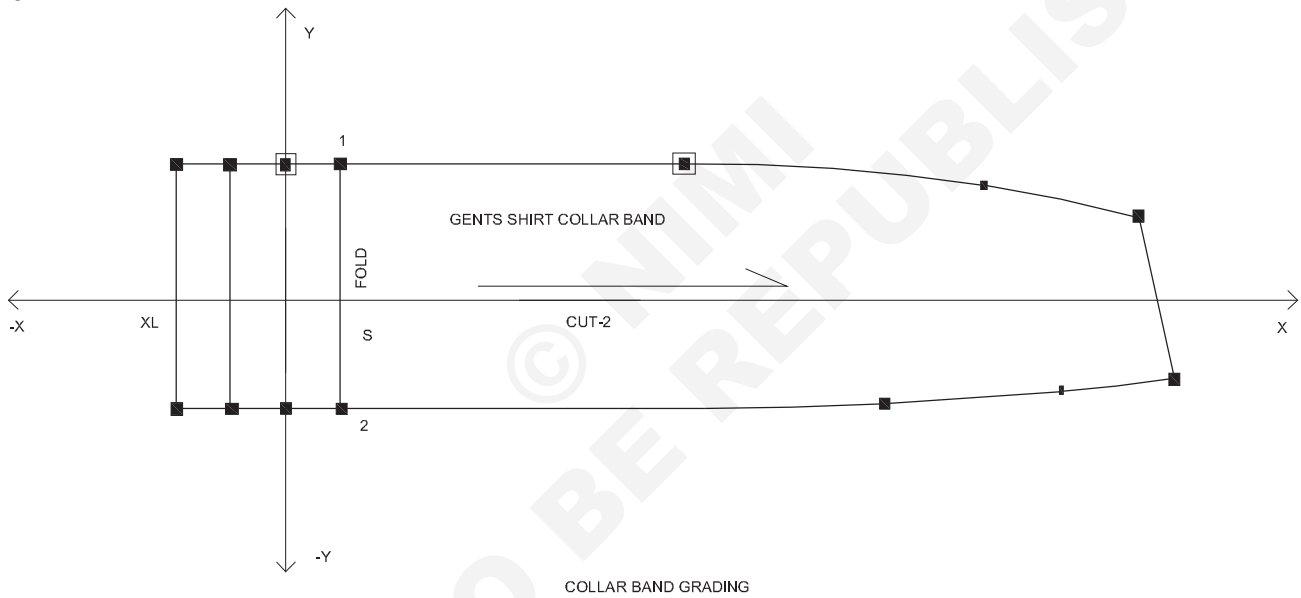
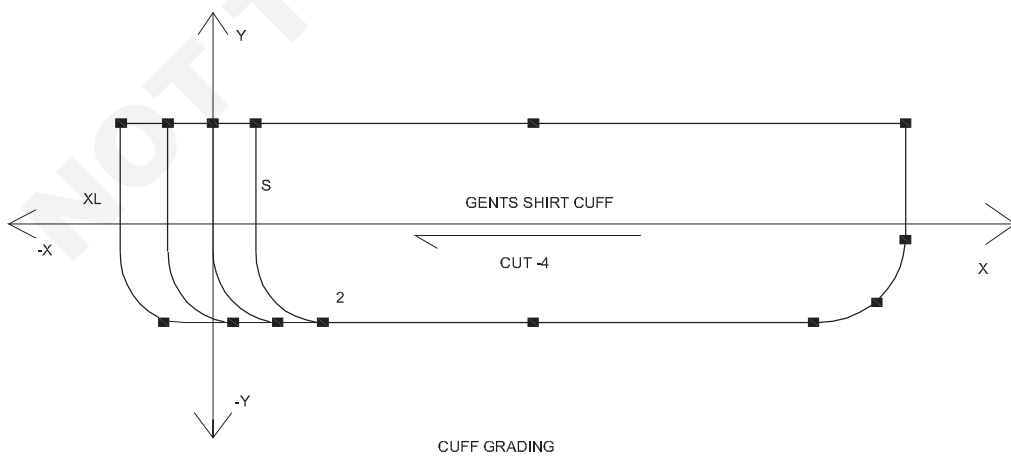


Fig 7



Back grading

Sizes -----> Point	M to S		M to L		L to XL	
	X	Y	X	Y	X	Y
1	-0.25	0	+0.25	0	+0.25	0
2	-0.25	-1	+0.25	+1	+0.25	+1
3	0	-1.25	0	+1.25	0	+1.25
4	+1	-1.25	-1	+1.25	-1	+1.25
5	+0.75	-1.25	-0.75	+1.25	-0.75	+1.25
6	+0.75	0	-0.75	0	-0.75	0

Increment table for Back**Yoke Grading**

Sizes -----> Point	M to S		M to L		L to XL	
	X	Y	X	Y	X	Y
1	0	0	0	+1	0	+1
2	-0.4	-1	+0.4	+1	+0.4	+1
3	-1	-1	+1	+1	+1	+1
4	-1	0	+1	0	+1	0
5	0	0	0	0	0	0

Sleeve Grading

Sizes -----> Point	M to S		M to L		L to XL	
	X	Y	X	Y	X	Y
1	-0.30	0	+0.30	0	+0.30	0
2	0	+1.25	0	-1.25	0	-1.25
3	+0.95	+0.85	-0.95	-0.84	-0.95	-0.84
4	+0.95	-0.42	-0.95	+0.42	-0.95	+0.42
5	+0.95	-0.84	-0.95	+0.84	-0.95	+0.84
6	0	-1.25	0	+1.25	0	+1.25

Collar, Collar band & Cuff grading

Sizes -----> Point	M to S		M to L		L to XL	
	X	Y	X	Y	X	Y
1	+1	0	-1	0	-1	0
2	+1	0	-1	0	-1	0

Get the work checked by your instructor.

Pattern grading of gents trousers

Objective: At the end of this exercise you shall be able to
• **grade the trousers pattern.**

Requirements

Tools / Instruments

- 'L' square - 1 No.
- 1 Feet scale - 1 No.
- Metre scale - 1 No.
- Set square - 1 No.
- Measuring tape - 1 No.
- Pattern cutting scissors - 1 No.
- HB pencil - 1 No.
- Pencil eraser - 1 No.

- Blue ink pen - 1 No.
- Green ink pen - 1 No.
- Red ink pen - 1 No.

Materials

- Brown paper (90 GSM) - 8 Nos.
- Trousers pattern set (M - Size) with spec. sheet.

PROCEDURE

TASK 1 : Grade the trousers pattern

1 Analyze the spec.sheet or measurement chart.

Sl. No.	Measurements in Cms	S	M	L	XL
1	Hip	98	102	106	110
2	Waist	82	86	90	94
3	Body rise	27.6	28	28.4	28.8
4	Inside leg length	80	81	82	83
5	Trouser bottom width	24.5	25	25.5	26
6	Waist band width	4	4	4	4

2 Take the 'M' Size Trousers patterns to be graded.

5 Calculate increments and prepare increment table.

3 Give notations to the pattern points to be graded.

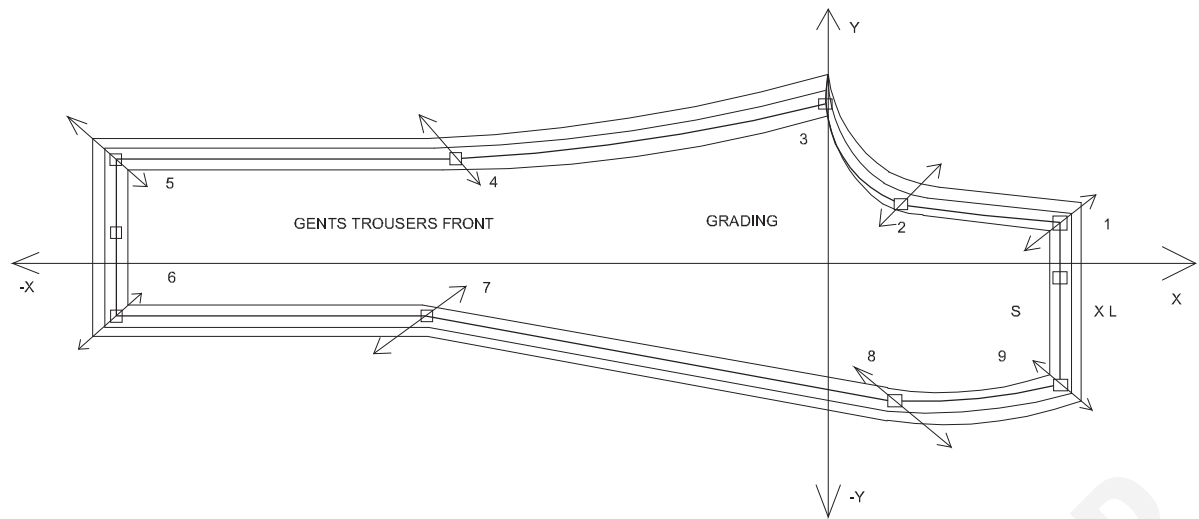
6 Grade the patterns. (Follow the method in TASK 1 of Ex.No. 2.1.16) (Fig 1 to Fig 3)

4 Draw pattern Axes on the cut pattern using red ink pen and scale.

Front grading

Sizes	M to S		M to L		L to XL	
----->						
Point	X	Y	X	Y	X	Y
1	-0.4	-0.35	+0.4	+0.35	+0.4	+0.35
2	-0.1	-0.35	+0.35	+0.35	+0.1	+0.35
3	0	-0.6	0	+0.6	0	+0.6
4	+0.5	-0.25	-0.5	+0.25	-0.5	+0.25
5	+1	-0.25	-1	+0.25	-1	+0.25
6	+1	+0.25	-1	-0.25	-1	+0.25
7	+0.5	+0.25	-0.5	-0.25	-0.5	-0.25
8	-0.1	+0.65	+0.1	+0.65	+0.1	-0.65
9	-0.4	+0.65	+0.4	-0.65	+0.4	-0.65

Fig 1



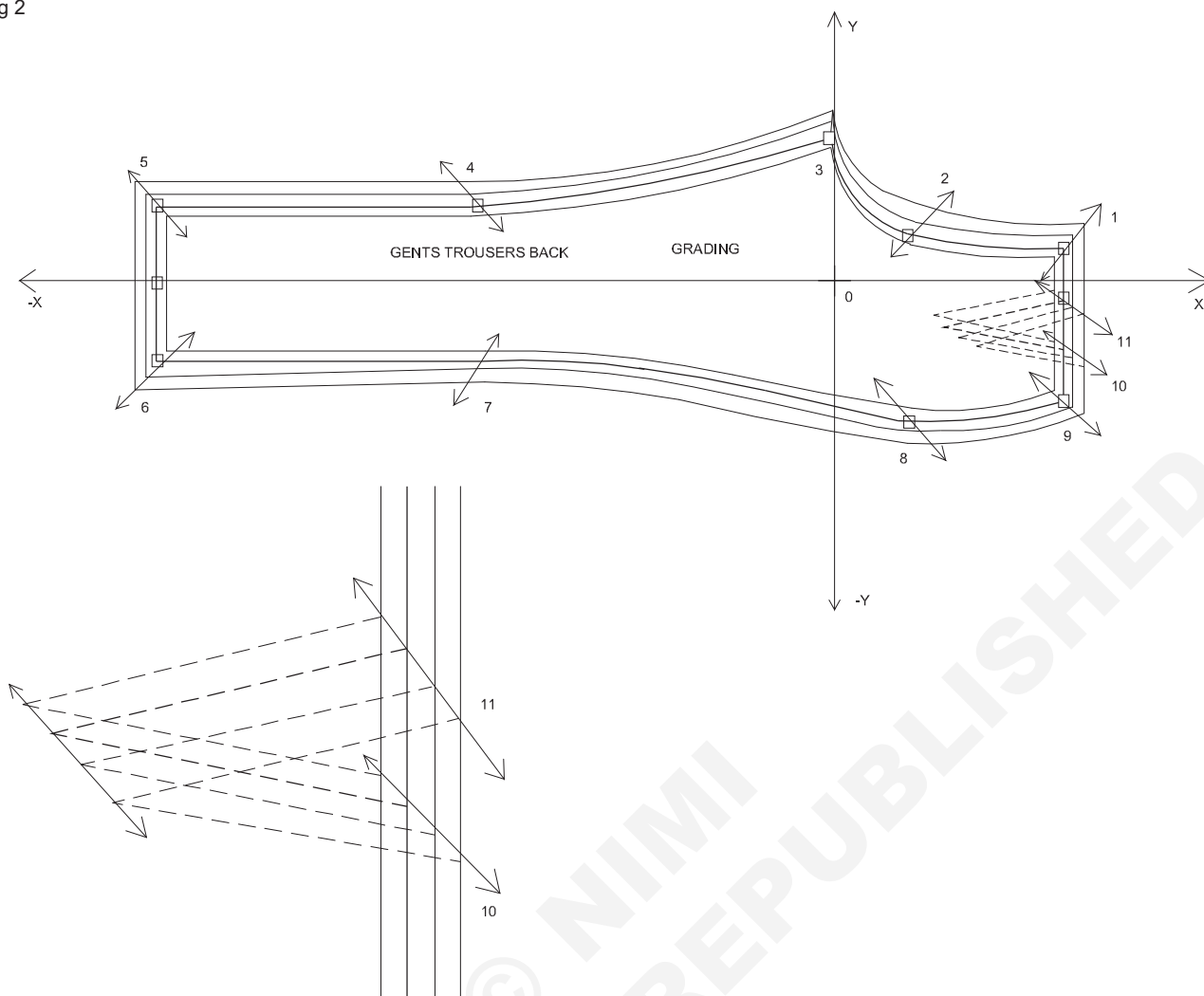
DRN2349H1

Back grading

Sizes ----->	M to S		M to L		L to XL	
Point	X	Y	X	Y	X	Y
1	-0.4	-0.3	+0.4	+0.3	+0.4	+0.3
2	-0.1	-0.3	+0.1	+0.3	+0.1	+0.3
3	0	-0.7	0	+0.7	0	+0.7
4	+0.5	-0.25	-0.5	+0.25	-0.5	+0.25
5	+1	-0.25	-1	+0.25	-1	+0.25
6	+1	+0.25	-1	-0.25	-1	-0.25
7	+0.5	+0.25	-0.5	-0.25	-0.5	-0.25
8	-0.1	+0.7	+0.1	-0.7	+0.1	-0.7
9	-0.4	+0.7	+0.4	-0.7	+0.4	-0.7
10	-0.4	+0.25	+0.4	-0.25	+0.4	-0.25
11	-0.4	+0.25	+0.4	-0.25	+0.4	-0.25

Increment table for back

Fig 2



DRN2349H2

Waist band grading

Sizes ----->	M to S		M to L		L to XL	
Point	X	Y	X	Y	X	Y
1	-2	0	2	0	2	0
2	-2	0	2	0	2	0

Fig 3



DRN2349H3

Get the work checked by your instructor.

Practice on tools of corel draw

Objectives: At the end of this lesson you shall be able to

- use tool box
- create effects
- create crop design
- use free hand tool
- create overlap filling design.

Requirements

Materials/Components

- Corel draw software

PROCEDURE

TASK 1: Pick tool selection

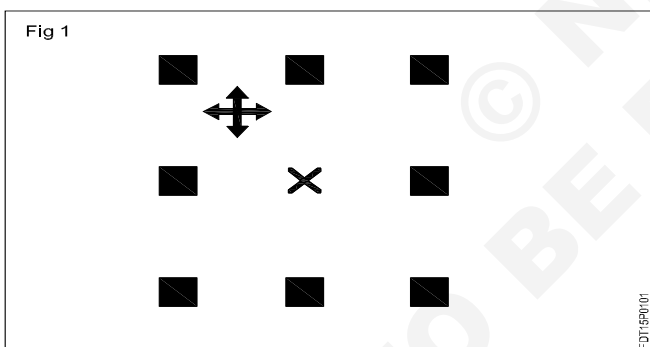


Pick tool

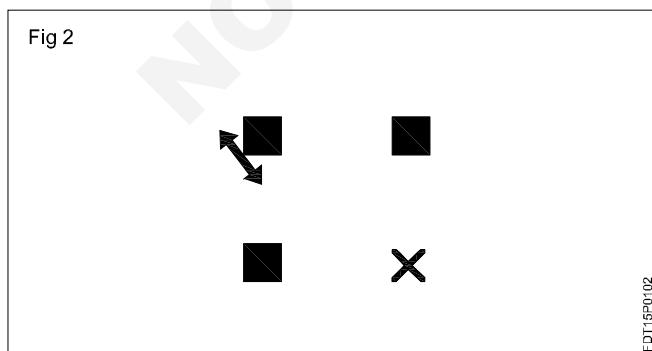
Select, position or transform objects.

Moving, scaling and stretching objects

- 1 To move an object, drag it. To constrain the movement to the horizontal or vertical axis, hold down **ctrl** while dragging Fig 1.

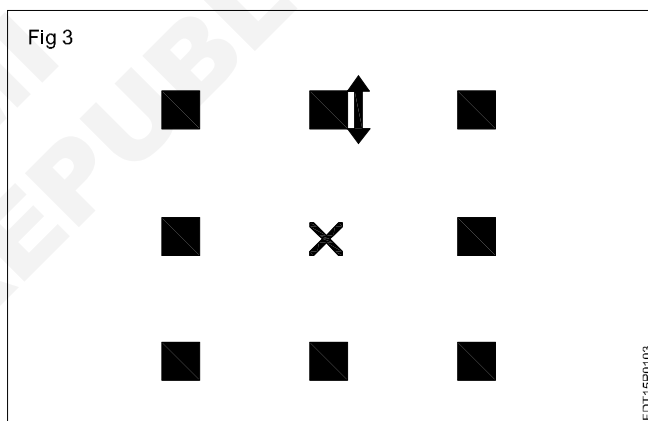


- 2 To nudge the object, press the **Arrow keys**.
- 3 To scale the object, drag one of the corner sizing handles, holding down **shift** if you want to scale from the centre Fig 2.

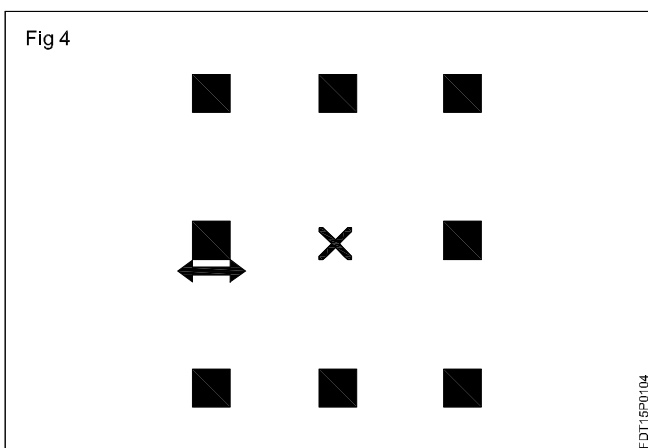


- 4 To stretch the object, drag one of the stretching handles, holding down **Shift** if you want to stretch from the centre.

- 5 The top and bottom stretching handles stretch the object vertically Fig 3.



- 6 The left and right stretching handles stretch the selection horizontally Fig 4.



- 7 To activate an object's rotation and skewing handles, click the centre handle.



Free Hand Pick Tool

Select objects by using a freehand selection marquee. Position and transform objects.

Selecting objects



Free Hand Pick Tool

- 8 Drag around the objects that you want to select. Object that are partially enclosed by the selection area are not selected
- 9 To select objects that are partially enclosed by the selection area, hold down **Alt** while dragging.



Shaping Tool

- 10 Edit a curve object or text character by manipulating nodes.

Shaping objects



Shape tool

- 11 To start changing the shape of an object, click it with **shape** tool to display its nodes.

Each type of object provides a specialized set of shaping methods.



Smudge Brush Tool

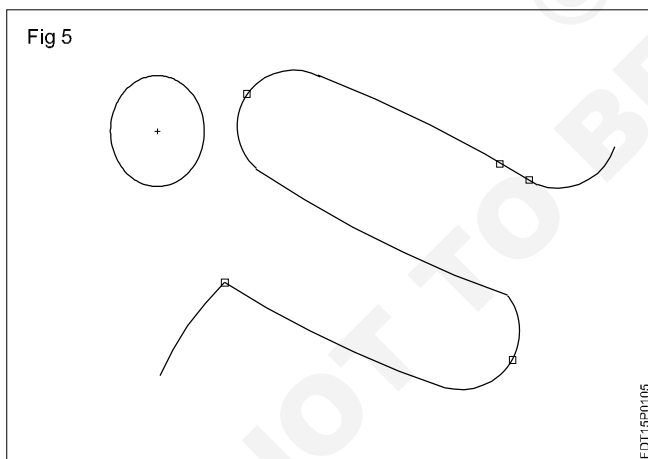
- 12 Change the shape of an object by dragging along its outline.

Smudge objects



Smudge brush tool

- 13 To smudge the inside of a selected object, click the outside of the object and drag inward.
- 14 To smudge the outside of a selected objects click the inside of the object and drag outward Fig 5.



Roughen Brush Tool

- 15 Distort the edge of an object by dragging along outline.

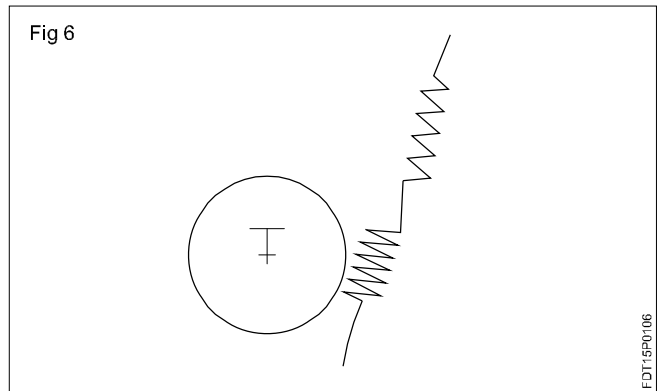
Roughening objects



Roughen brush tool

- 16 To roughen a selected object, point to the area on the outline you want to roughen, and then drag the outline to distort it Fig 6.
- 17 To change the nib size, type a value in the Nib size box on the property bar, and then press **Enter**.

Fig 6



Free Transform Tool

- 18 Rotate , skew, mirror and scale objects.

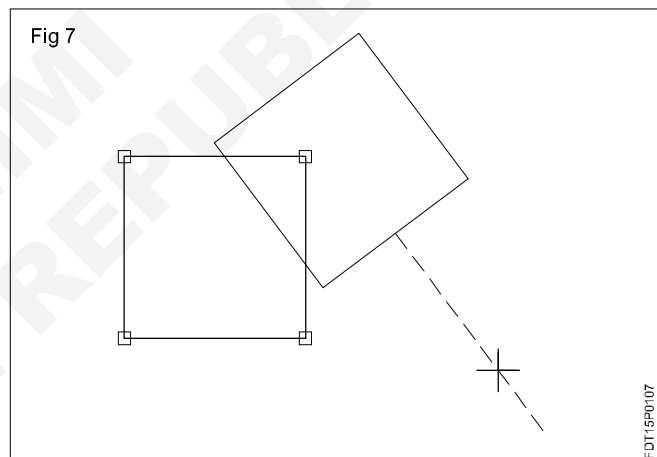
Transforming Objects Interactively




Free transform tool


- 19 To rotate a selected object around a fixed point, click the **Free rotation tool** button  on the property bar, click in the drawing window to fix the anchor point, and then drag Fig 7.


Fig 7



- 20 To choose a different free **transform mode**, click one of the following button on the property bar:

- 21 Free angle reflection tool button  - lets you scale a selected object, or mirror it horizontally or vertically

- 22 Free scale tool button  -lets you resize a selected object by scaling it along the horizontal and vertical axes simultaneously, relative to its anchor point

- 23 Free skew tool button  -lets you skew a horizontal and vertical lines of an object simultaneously, relative to its anchor point.

- 24 To transform a selected object by using the mode you've chosen, click in the drawing window to fix the anchor point and then drag.



Smear tool

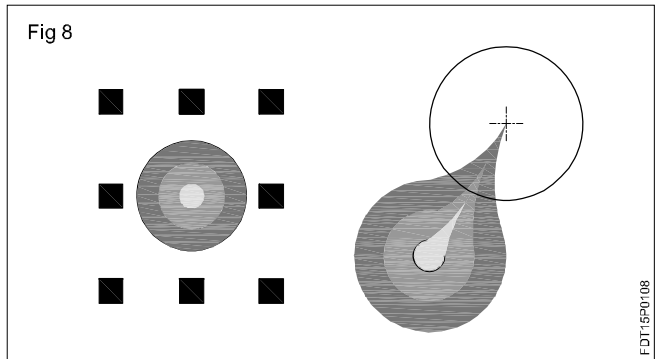
- 25 Change the edge of an object by dragging along its outline.

Smearing object



Smear tool

- 26 To smear the outside of an object, click inside an object, close to its edge, and drag outwards Fig 8.
- 27 To smear the inside of a selected object, click outside an object, close to its edge, and drag inwards.
- 28 To change the nib size, type a value in the **Nib radius** box on the property bar, and then press **Enter**.



TASK 2: Create effects

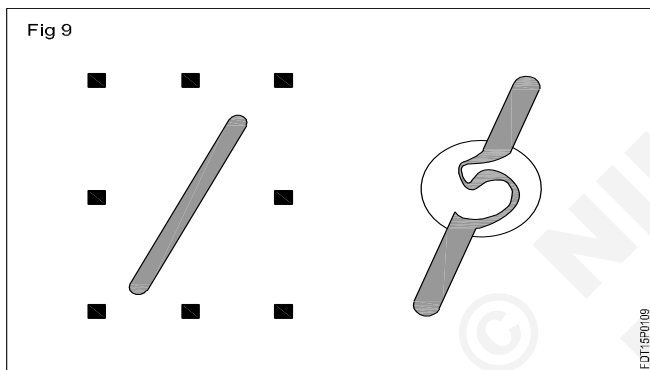
Twirl tool - Add swirl effects by dragging along the outline of an object.

Adding twirl effects



Twirl tool

- 1 Click the edge of an object, and hold down until the twirl is the size you want. To position and reshape the twirl, drag while holding down the mouse button Fig 9.



- 2 To change the nib size, type a value in the **Nib radius** box on the property bar, and then press **Enter**.
- 3 To set the speed at which the twirl effect is applied, type a value in the **Rate** box, and press **Enter**.
- 4 To set the direction of the twirl effect, click the counter lockwise twirl button or the clockwise twirl button the property bar.

Attract tool - Reshape objects by attracting nodes to the cursor.



Shaping objects by attracting nodes

Attract tool

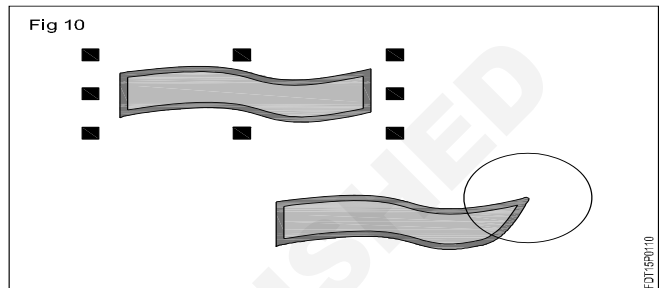
- 5 Click inside or outside a selected object, close to its edge, and hold down to reshape the edge. For a more pronounced effect, drag while holding down the mouse button Fig 10.
- 6 To change the nib size, type a value in the **Nib radius** box on the property bar, and then press **Enter**.

Repel tool - Reshape objects by pushing nodes away from the cursor.

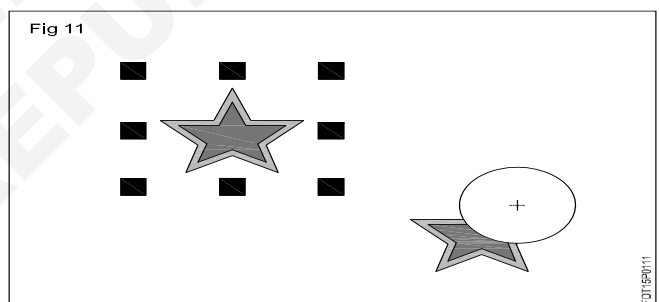
Shaping objects by pushing nodes away



Repel tool



- 7 Click inside or outside a selected object, close to its edge, and hold down the mouse button to reshape the edge. For a more pronounced effect, drag while holding down the mouse button Fig 11.



- 8 To change the nib size, type a value in the **Nib radius** box on the property bar, and then press **Enter**.

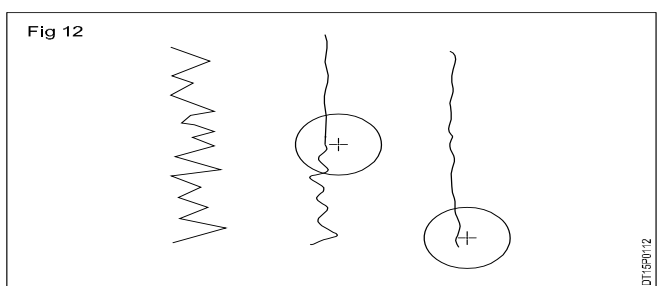
Smoothing tool - smooth object by dragging along its outline

Smoothing objects



smooth tool

- 9 Drag along the object edge.
- 10 To change the nib size, type a value in the **Nib radius** box on the property bar, and press **Enter** Fig 12.
- 11 To set the speed at which the smoothing effect is applied, type a value in the **Rate** box, and press **Enter**.



TASK 3: Create crop design

Crop tool - Remove the areas outside a selection

Cropping Objects



Crop tool

- 1 To crop selected objects, drag to define the protected area.

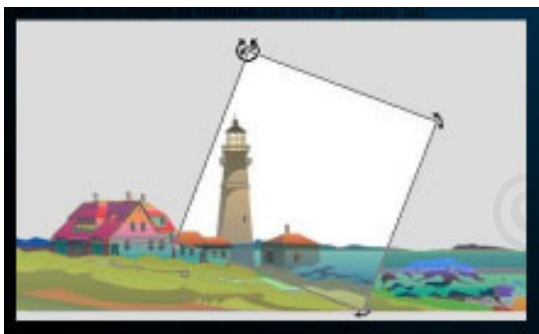
You can use the crop tool on both bitmap and vector objects Fig 13.

Fig 13



- 2 To rotate the protected area, click it, and then drag a rotation handle Fig 14.

Fig 14



- 3 To crop the selected objects to the protected area, double click the protected area.

Knife tool- Slice an object to split in into two separate objects.

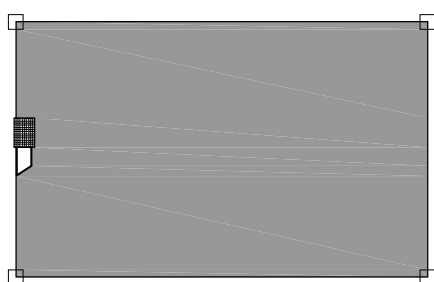
Splitting objects



Knife tool

- 4 To start cutting or splitting an object, position the knife tool over the outline of the object where you want to cutting, and click Fig 15.

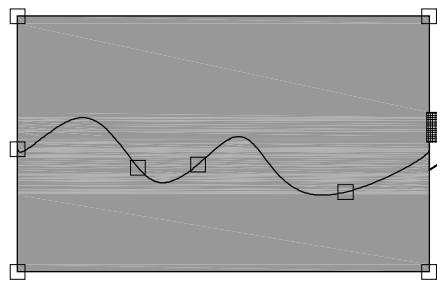
Fig 15



FDT15P0115

- 5 To create a freehand cut line, drag where you want to cut Fig 16.

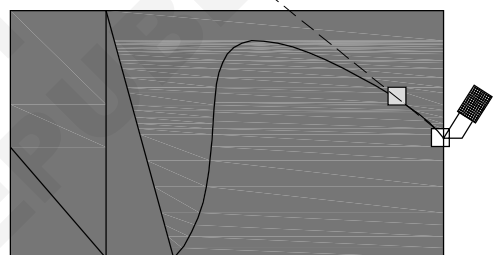
Fig 16



FDT15P0116

- 6 To cut object along a bezier line, hold down **Shift**, click where you want to place the first node, drag the control handle to where you want to position the next node, and click. Continue clicking to add additional straight segments to the line. To add a curved segment, point to where you want to place nodes, and drag to shape the curve Fig 17.

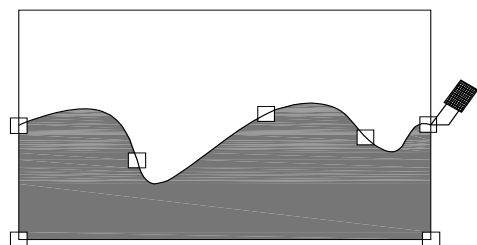
Fig 17



FDT15P0117

- 7 To complete your task, point to where you want to stop cutting on the outline of the object, and click when the **knife** tool snaps upright.
- 8 To finish cutting the object while keeping only one of its parts, point to where you want to stop cutting, press **Tab** once or twice until only the part you want to keep is selected, and then click Fig 18.

Fig 18



FDT15P0118

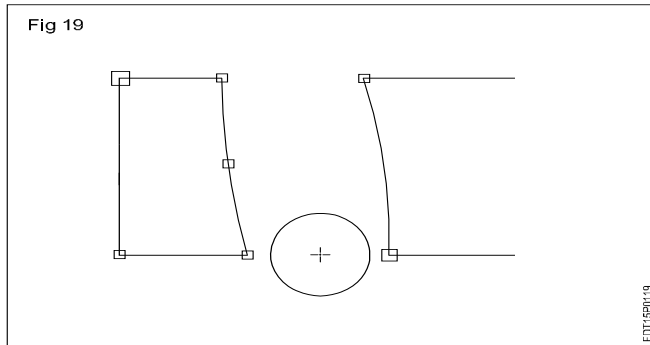
Eraser tool (x) - Remove unwanted areas in a drawing.



Erasing portion of objects

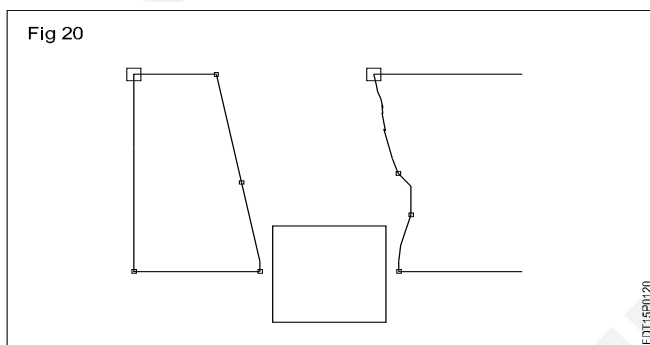


Eraser tool

- 9 To erase part of a selected object, drag where you want to erase Fig 19.




- 10 To toggle between a square nib and round nib, click the **Eraser shape** button  on the property bar. (The **Eraser shape** button applies a square nib when pressed ) Fig 20



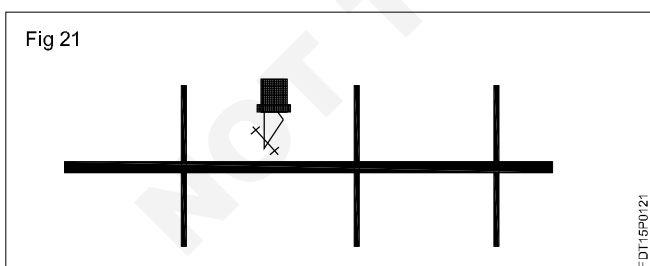
- 11 To change the thickness of the nib, hold down **Shift** and drag up to increase the nib size or down to decrease the nib size.

Virtual segment delete tool - Remove overlapping segment in objects.

Deleting virtual line segments

 Virtual segment delete tool

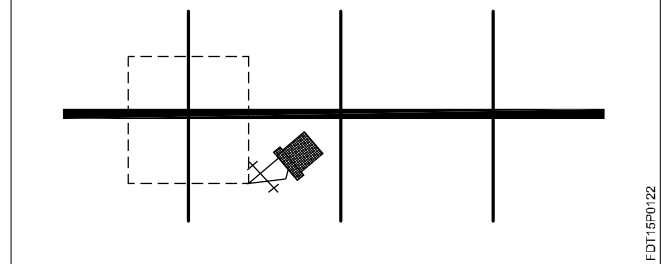
- 12 To delete a virtual line segment, move the pointer to the line segment you want to delete, and then click the line segment Fig 21




- 13 To delete multiple line segment at one time, drag a marquee around all line segments that you want to delete. Hold down **Ctrl** to constrain the marquee to a square Fig 22.

Zoom tool (Z) - change the magnification level of the document window

Fig 22



Zooming

 Zoom tool

- 14 To zoom in on a portion of your work, click in the drawing window.
- 15 To zoom in to a selected area of your work, drag to define the area Fig 23.
- 16 To zoom in to all objects on the page, double-click the **Zoom** tool.

Fig 23



- 17 To zoom out, right-click (or hold down **Shift** and click) in the drawing window.

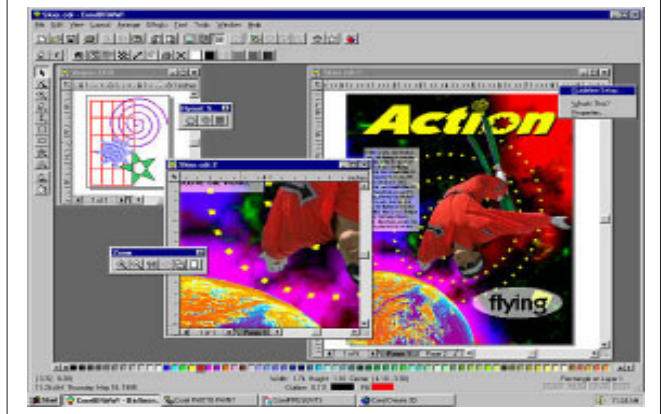
Pan tool (H) - Drag hidden areas of a drawing into view without changing zoom level.

Panning

 Pan tool

- 18 To view a different part of the page, drag anywhere on the page Fig 24.

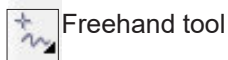
Fig 24



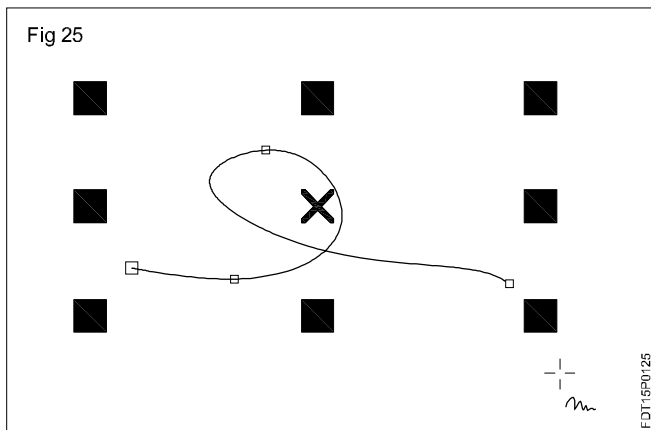
TASK 4: Free hand tool

Freehand tool (F5) - Draw curves and straight line segments.

Drawing freehand lines

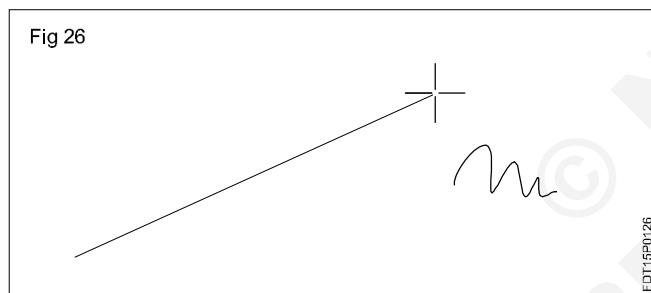


1 To draw, drag the mouse like a pencil on a paper Fig 25.



2 To erase as you draw, hold down **shift** and drag backwards.

3 To draw a straight line, click where you want the line to begin, and then click where you want it to end Fig 26.



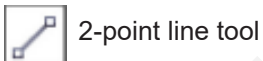
4 To set option, double-click the **Freehand** tool.

5 To change a line or curve's shape, click the **shape** tool



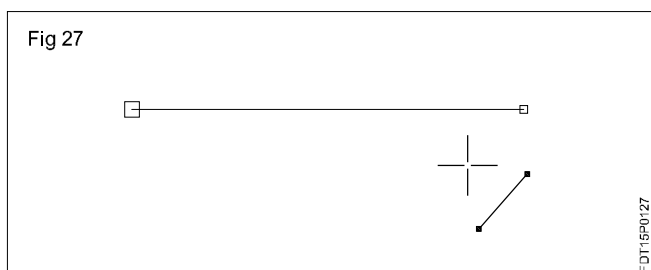
2-Point Line tool - draw a straight line by drawing from the starting point to the end point.

Drawing 2-point lines

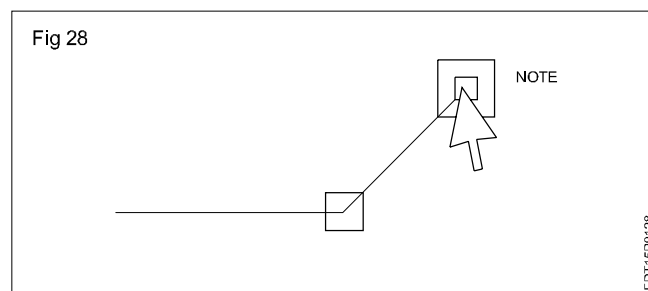


6 To start drawing, click in the drawing window.

7 To draw a straight line, point to where you want to start the line, and drag to draw the line Fig 27.



8 To add a line segment to a selected line, point to the end node of a selected line, and draw the line Fig 28.



Bezier tool - Draw curves one segment at a time

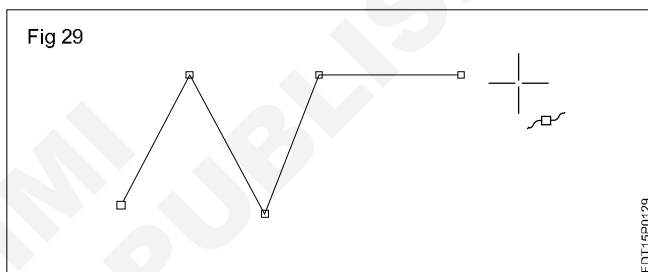
Drawing Bezier lines



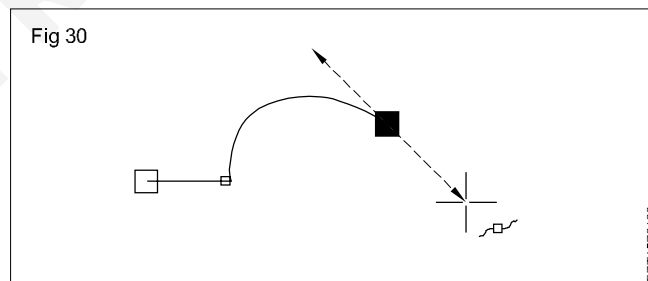
Bezier tool

9 To start drawing, click in the drawing window.

10 To draw straight line, point to where you want to end the line, and then click Fig 29.



11 To draw a curve, drag to define it, holding down **Ctrl** if you want to constrain the curve to 15-degree increments Fig 30.



12 To stop drawing, press the **spacebar**.

13 To set option, double-click the **Bezier** tool.

14 To change a line or curve's shape, click the **Shape** tool



Artistic Media tool(I) - Add artistic brush, spray, and calligraphic effects by using freehand strokes.

Using artistic media



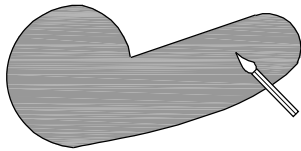
Artistic media tool

15 To draw with the **Artistic media** tool, drag along the path you want, as with pencil on paper Fig 31.





16 To choose a drawing mode, click the appropriate button on the property bar:

- Preset mode button lets you draw preset curves

Fig 31



FDT15P0131

- Brush mode button  - lets you draw brush curves
- Sprayer mode button  - lets you spray object
- Calligraphic mode button  - lets you draw calligraphic curves
- Pressure mode button  - lets you draw pressure-sensitive curves

17 To specify settings for the drawing mode you've chosen, use the controls on the property bar.

18 If you are using the mouse, press the **Up arrow** or **Down arrow** to simulate changes in pen pressure and change the width of the line.

Pen tool - Draw curves in segments and preview each segment as you draw.

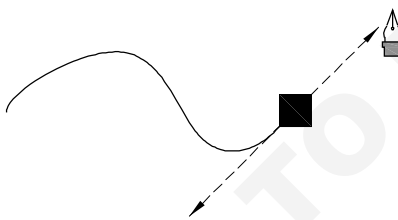
Drawing precision lines.



Pen tool

19 To draw a curved segment, click where you want to place the first node, and then drag the control handle to where you want to place the next node. Release the mouse button, and then drag the control handle to create the curve you want Fig 32.

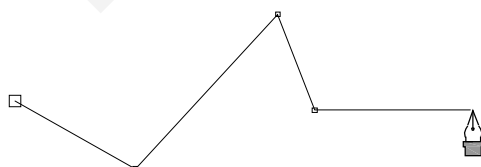
Fig 32



FDT15P0132

20 To draw a straight segment, click where you want to start the line segment, and then click where you want to end it Fig 33.

Fig 33

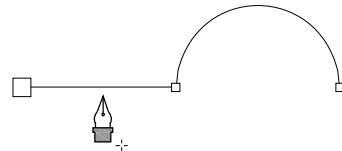


FDT15P0133

21 To finish the line, double click.

22 To add a node, point to where you want to add the node, and then click Fig 34.

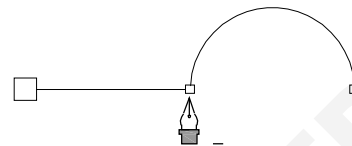
Fig 34



FDT15P0134

23 To delete a node, point to it, and then click Fig 35.

Fig 35



FDT15P0135

B-Spline tool - Draw curved lines by setting control points that shape the curve without breaking it into segments.

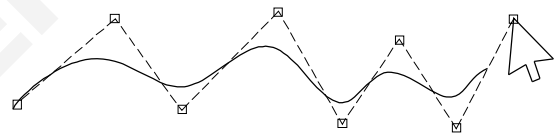
Drawing B-splines



B-spline tool

24 To draw a B-spline, click where you want to start the line, then click to set as many control points as you need to shape your line Fig 36.

Fig 36



FDT15P0136

25 To end the line, double-click


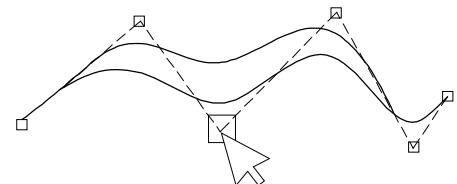


26 To reshape the line by using control points, select the line by using the shape tool  and reposition the control points to reshape the line Fig 37.

Fig 37



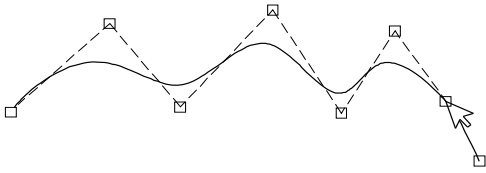
FDT15P0137

27 To add a control point, select the line by using the shape tool  and double-click along a control line Fig 38.

28 To delete a control point, select the line by using the shape tool  and double-click the control point that you want to delete.

Polyline tool - Draw connected curves and straight lines in one continuous action.

Fig 38



FD15P0138

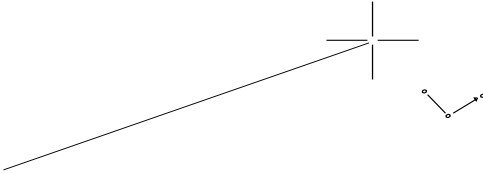
Drawing polylines



Polyline tool

29 To draw a straight segment, click where you want to start the line segment, and then click where you want to end it Fig 39.

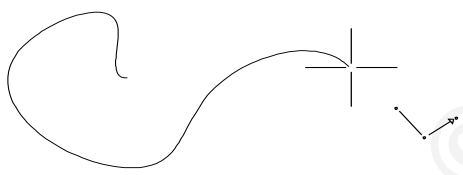
Fig 39



FD15P0139

30 To draw a curved segment, click where you want to start the segment, and then drag across the drawing page Fig 40.

Fig 40



FD15P0140

TASK 5: Create overlap filling design

Filling object overlaps



Smart fill tool

1 To fill an area where objects overlap, choose your settings the property bar, and then click the area Fig 43.

Smart Drawing tool (Shift+S) - Convert freehand strokes to basic shapes or smoothed curves.

31 To end the line, double-click.

3-Point Curve tool - Draw a curve by dragging from the starting point to the endpoint and then positioning the centre point.

Drawing precise curves



3 point curve tool

32 To define the start and end points of the curve, click where you want to start the curve, and then drag to where you want the curve to end Fig 41.

Fig 41

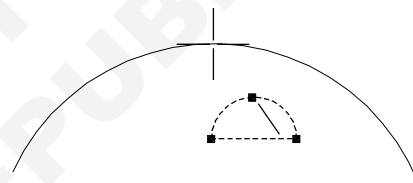


FD15P0141

33 To define the centre point of the curve, release the mouse button, and then click where you want the centre of the curve to be.

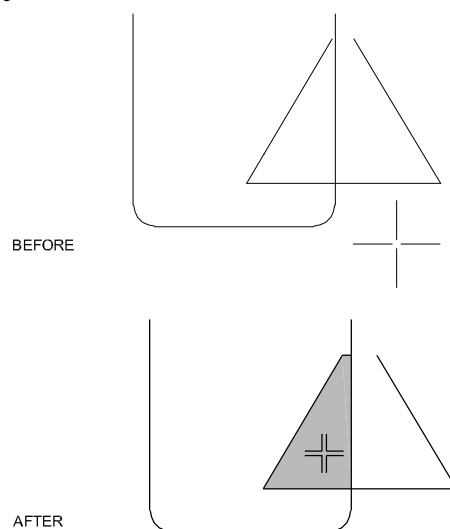
Smart Fill tool - Create objects from overlapping areas, and apply a fill to those objects Fig 42.

Fig 42



FD15P0142

Fig 43



FD15P0143

Shape tools in corel draw

Objectives: At the end of this lesson you shall be able to

- use shape tool and create rectangle
- create ellipse
- use drawing tool
- create basic shapes
- create dimension lines.

PROCEDURE

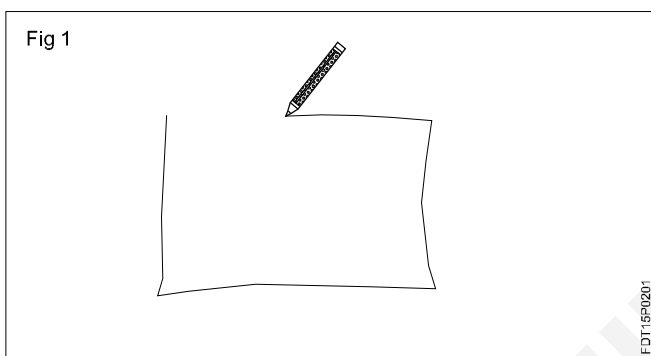
TASK 1: Rectangle tool overview

Using shape recognition

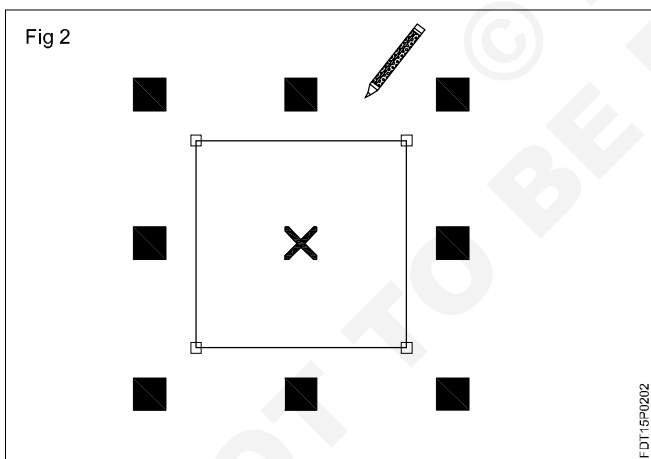


Smart drawing tool

- 1 To draw a shape or a line by using shape recognition, draw a shape or a line in the drawing window Fig 1.



- 2 The freehand stroke that you draw is converted to a basic shape or smoothed curve Fig 2.



TASK 2: Create ellipse

Ellipse tool (F7) - Draw circles and ellipse by dragging in the drawing window.

- 3 To erase as you draw, hold down **Shift** and drag backward.
- 4 To specify shape recognition setting, use the property bar.

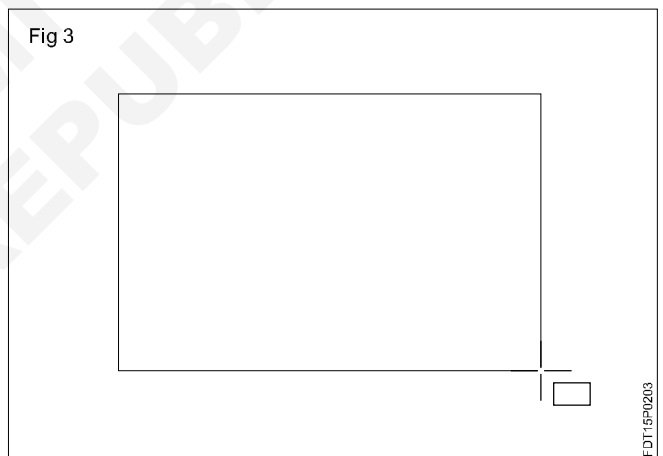
Rectangle tool (F6) - Draw squares and rectangles by dragging in the drawing window.

Drawing rectangles



Rectangle tool

- 5 To draw a rectangle, drag where you want to place it Fig 3.



Holding down **ctrl** draws a square, while holding down **Shift** draws from the centre.

- 6 To change the rectangle's shape, click the **shape** tool

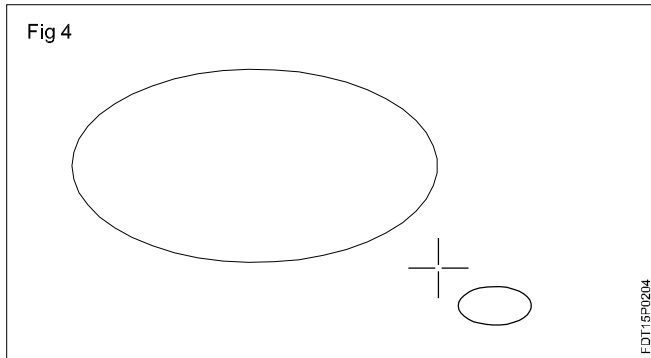


Drawing ellipses






Ellipse tool

- 1 To draw an ellipse, drag where you want to place it Fig 4.



Holding down **Ctrl** draws a circle, while holding down **Shift** draws from the centre.

- 2 To change the ellipse into a pie shape or an arc, click the pie button  or the Arc button  on the property bar.

To change a pie shape or an arc black to an ellipse, click the Ellipse button .

- 3 To change the ellipse's shape, click the **shape** tool



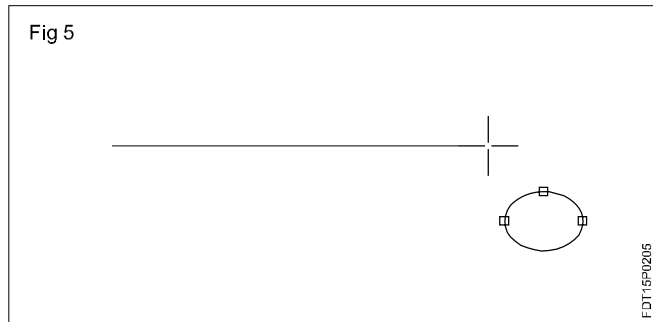
3-Point Ellipse tool-Draw ellipses at an angle.

Drawing precise ellipses

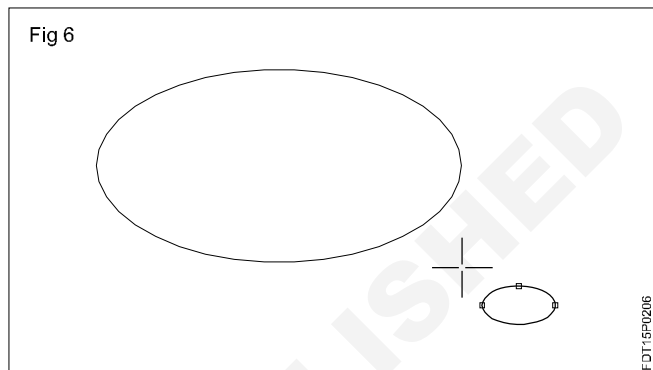


3 point ellipse tool


- 4 To define the width of the ellipse, drag to draw the center line of the ellipse at the angle you want, and then release the mutton button Fig 5.



- 5 To define the height of the ellipse, move the pointer, and then click. (Hold down **Ctrl** to draw a circle) Fig 6.



- 6 To change the ellipse into a pie shape or an arc, click the pie button  or the **Arc** button on the property bar.

To change a pie shape or an arc back to an ellipse, click the Ellipse button .

- 7 To change the ellipse's shape, click the **Shape** tool.



TASK 3: Use drawing tool

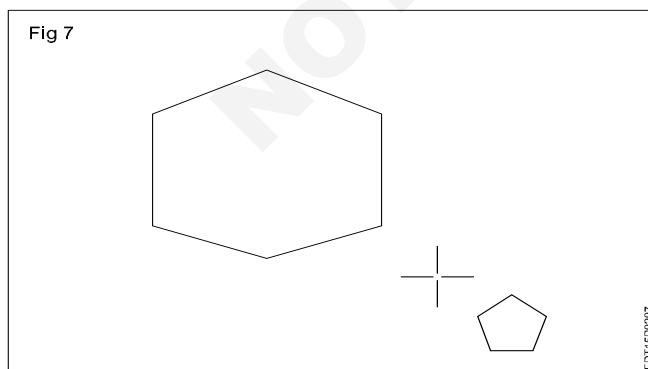
Polygon tool (Y) - Draw polygons by dragging in the drawing window.

Drawing polygons



polygon tool

- 1 To draw a polygon, drag where you want to place it, holding down **Ctrl** if you want to draw a polygon with equal sides Fig 7.



- 2 To adjust the number of sides or points on a selected polygon, type a value in the Number of points or side on polygon, star and complex star box on the property bar.

- 3 To change the polygon's shape, click the **Shape** tool



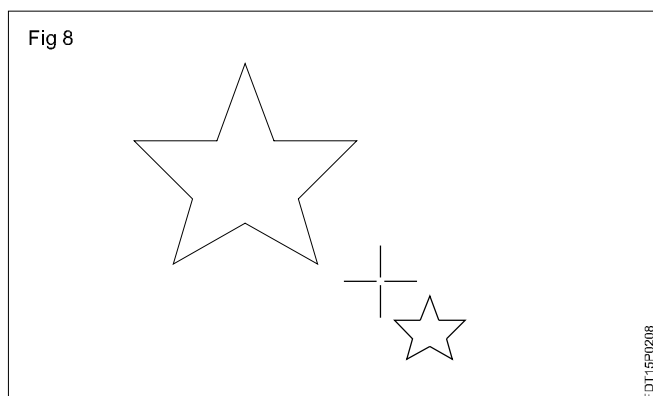
Star tool - Draw uniform, outlined stars.


Drawing perfect stars



Star tool

- 4 To draw a perfect star, drag where you want to place it, holding down **Ctrl** if you want to draw a perfect star with equal sides Fig 8.



- 5 To adjust the number of sides or points on a selected star, type a value in the **points or sides** box on the property bar.
- 6 To adjust the sharpness of a selected star, type a value in the sharpness box on the property bar.
- 7 To change the perfect star's shape, click the **Shape** tool 

Complex star tool - Draw star that have intersecting sides.

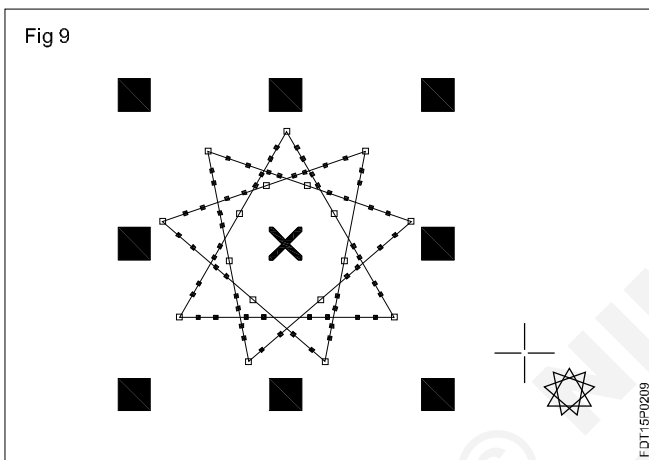
Drawing complex stars




Complex star tool

- 8 To draw a complex star, drag where you want to place it, holding down **Ctrl** if you want to draw a complex star with equal sides Fig 9.

Fig 9



- 9 To adjust the number of sides or points on a selected star, type a value in the points or sides box on the property bar.
- 10 To adjust the sharpness of a selected star, type a value in the **Sharpness** box on the property bar.
- 11 To change the complex star's shape, click the **Shape** tool. 

Graph paper tool (D) - Draw a grid. 

Drawing grids



Graph paper tool

TASK 4 : Create basic shape

Drawing basic shades

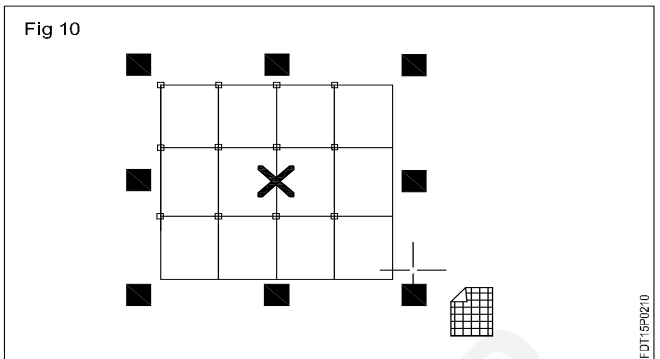


Basic shapes tools

- 1 To draw a basic shape, choose a shape from the perfect shapes picker on the property bar, and then drag in the drawing window until the shapes is the size you want Fig 12.
- 2 To adjust the basic shape, drag its glyph Fig 13.

- 12 To draw a grid, use the controls on the property bar to set the number of columns and rows, and drag in the drawing window where you want to place the grid. To make the outer boundary a square, hold down **Ctrl** while dragging Fig 10

Fig 10



Spiral tool (A) - Draw symmetric al and logarithmic spirals.

Drawing spirals



Spiral tool



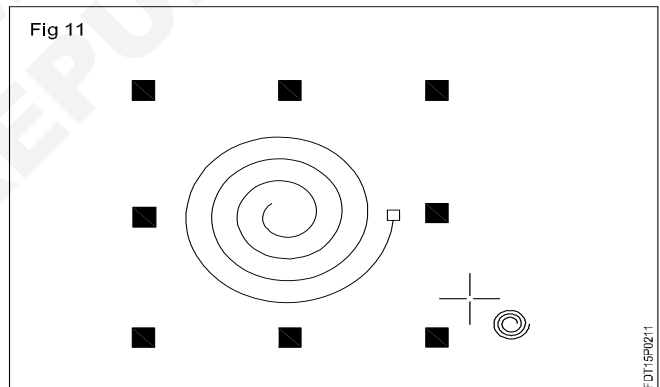
- 13 To draw a spiral, choose a spiral type from the property bar by clicking the  **Symmetrical spiral** button or the Logarithmic spiral button . and then drag in the drawing window where you want to place the spiral Fig 11.

Fig 11



- 14 To specify the tightness of a spiral, type a value in the spiral revolution box on the property bar.

- 15 To change the spirals shape,click the Shape tool 

Basic shapes tool - Draw triangles, circles, cylinders, hearts and other shapes.

Fig 12

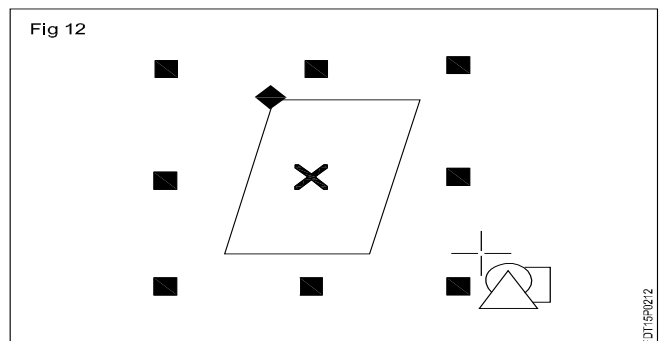
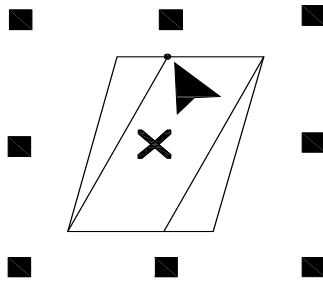


Fig 13



FDT15P0213

Arrow Shapes tool - Draw of various shapes and directions.

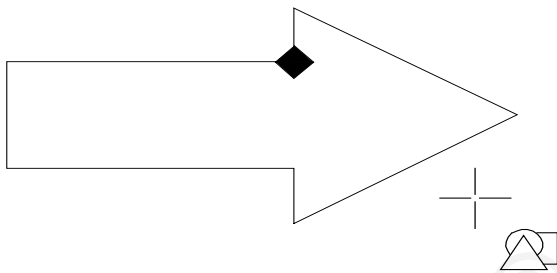
Drawing arrow shapes



Arrow shapes tool

- 3 To draw an arrow shape, choose a shape from the perfect shapes picker on the property bar, and then drag in the drawing window until the shape is the size you want Fig 14.

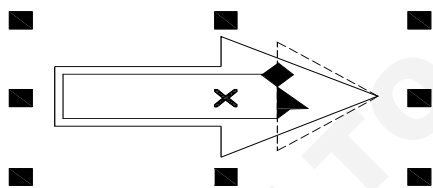
Fig 14



FDT15P0214

- 4 To adjust the arrow shape, drag its glyph Fig 15.

Fig 15



FDT15P0215

Flowchart shapes tool - Draw flowchart symbols.

Drawing flowchart shapes



Flowchart shapes tool

- 5 To draw a flow chart shape, choose a shape from the **Perfect Shapes** picker on the property bar, and then drag in the drawing window until the shapes is the size you want Fig 16.

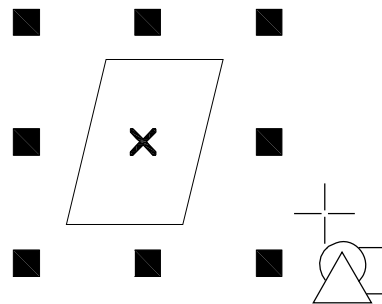
Banner shapes tool- Draw ribbon objects and explosion shapes.

Drawing banner shapes



Banner shapes tool

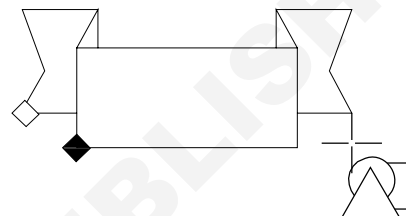
Fig 16



FDT15P0216

- 6 To draw a banner shape, choose a shape from the **Perfect shapes** picker on the property bar, and then drag in the drawing window until the shape is the size you want Fig 17.

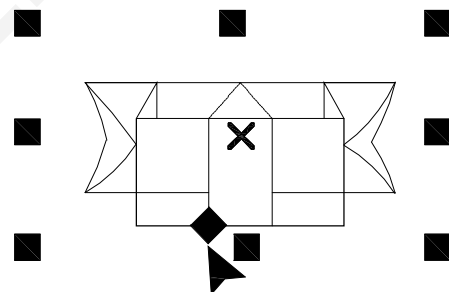
Fig 17



FDT15P0217

- 7 To adjust the banner shape, drag its glyphs Fig 18.

Fig 18



FDT15P0218

Callout Shapes tool - Draw labels and speech bubbles.

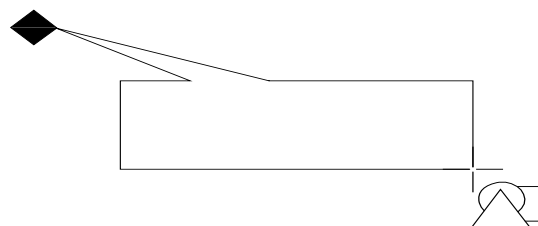
Drawing callout shapes



Callout shapes tool

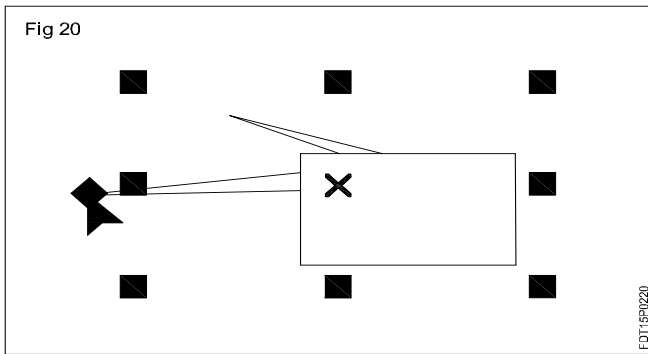
- 8 To draw a callout shape, choose a shape from the **Perfect Shapes** picker on the property bar, and then drag in the drawing window until the shape is the size you want Fig 19.

Fig 19



FDT15P0219

9 To adjust the callout shape, drag its glyph Fig 20.



Text tool (F8) - Add and edit paragraph and artistic text.

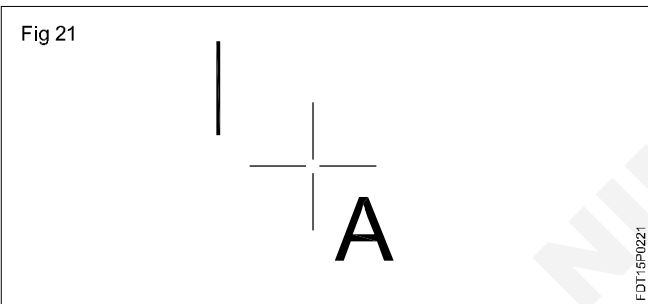
Adding text



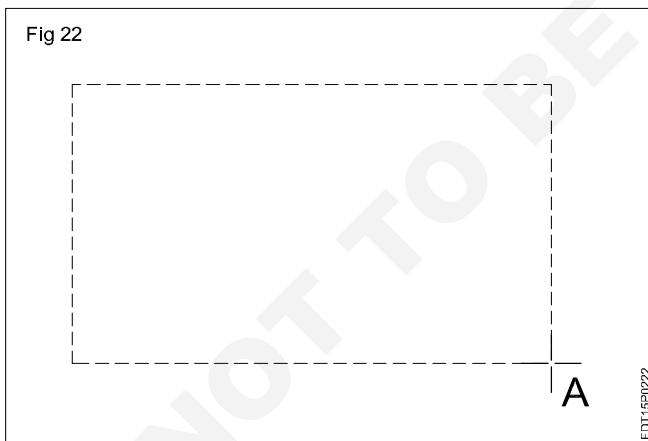
Text tool

You can create two kind of text: artistic text and paragraph text.

10 To add artistic text , click anywhere on the page, and then start typing Fig 21.



11 To add paragraph text, drag to create a paragraph text frame Fig 22.



TASK 5 : Create dimension lines

Parallel Dimension tool - Draw slanted dimension lines.

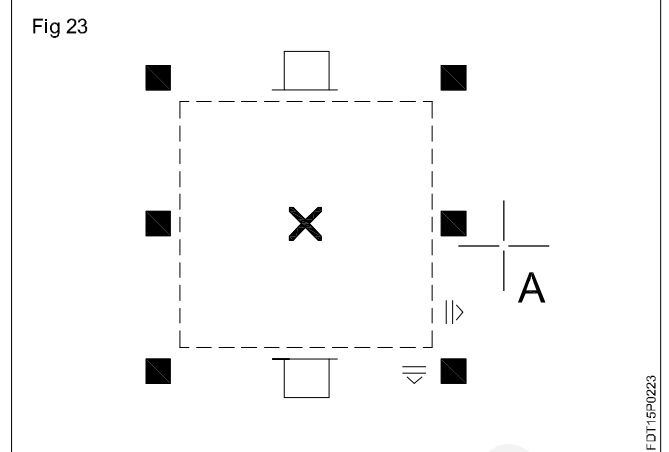
Drawing Parallel dimension lines



Parallel dimension tool

1 To draw a parallel dimension line, click the point where you want to the start the line, and drag to where you want to place the endpoint of the dimension lines Fig 25.

A frame appears that marks where you can type Fig 23.



12 To add paragraph text to the inside of an object, position the pointer at the inside border of the object, and then when the pointer changes to an insert cursor, begin typing Fig 24.

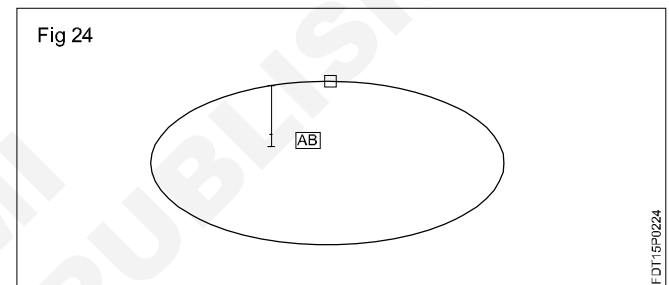


Table tool - Draw, select and edit tables.

Adding tables to drawings



Table tool

13 To add a table to a drawing, click the table tool, type values in the rows and columns boxes on the property bar and then drag diagonally to draw the table.

14 To modify the table border, click the border selection button on the property bar, choose the lines you want to modify , and then choose a line width from the width list box.

2 Release the mouse, then move the pointer horizontally or vertically to position the dimension line Fig 26.

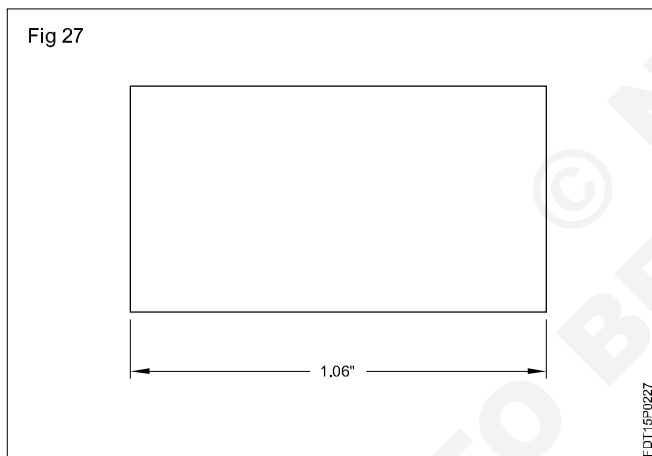
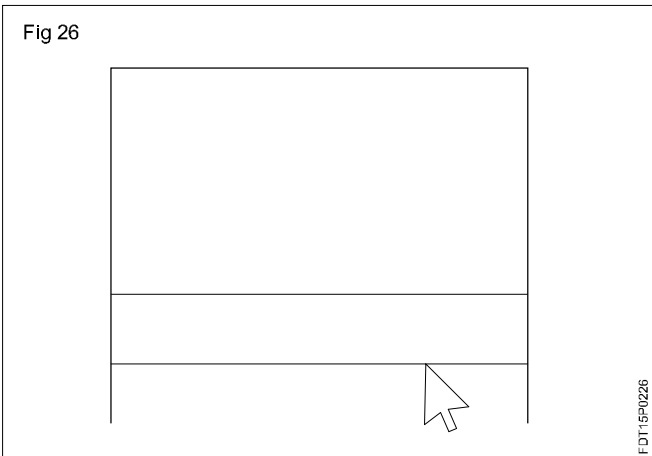
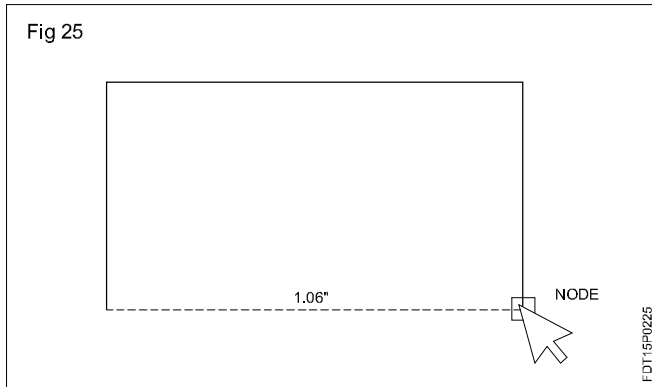
3 Click to place the dimension text Fig 27.

Horizontal or vertical Dimension tool - Draw horizontal or vertical dimension lines.

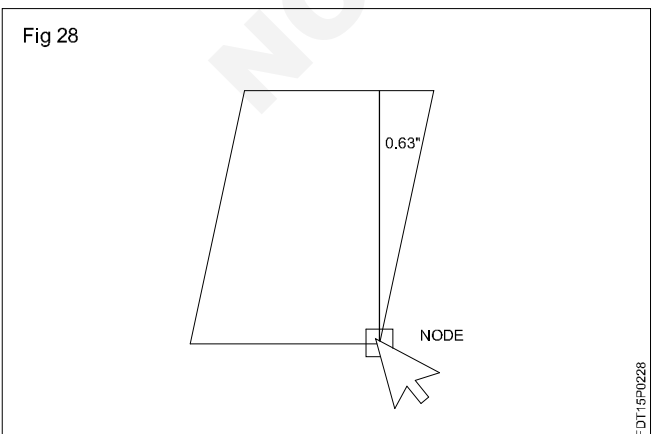
Drawing Horizontal or vertical dimension lines



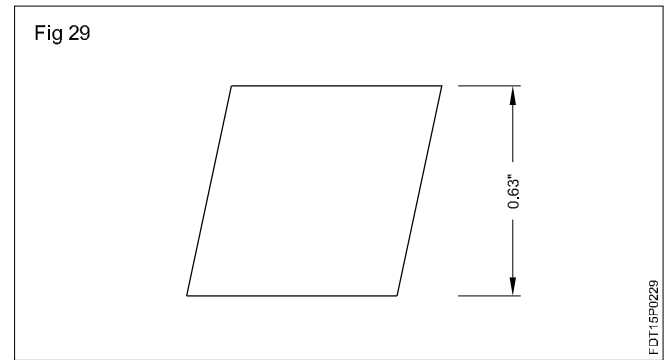
Horizontal or vertical dimension tool



- 4 To draw a vertical or horizontal dimension line, click the point where you want to start the line, and drag to where you want to place the endpoint of the dimension line Fig 28.



- 5 Release the mouse, and move the pointer vertically or horizontally to position the dimension line Fig 29.



- 6 Click to place the dimension text.

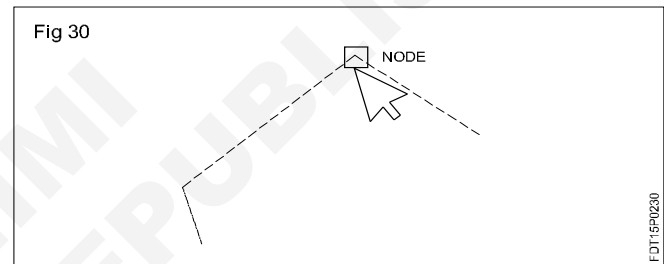
Angular Dimension tool - Draw angular dimension lines.

Drawing Angular dimension lines

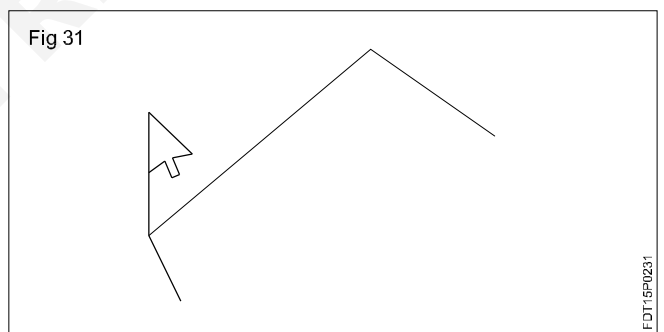


Angular dimension tool.

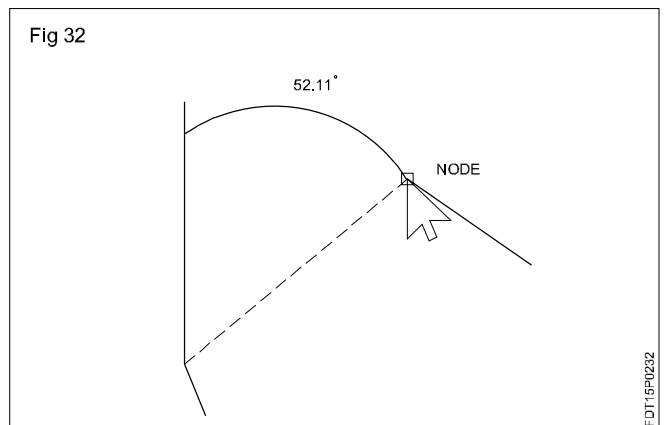
- 7 To draw an angular dimension line, click where you want the two lines that measure the angle to intersect Fig 30



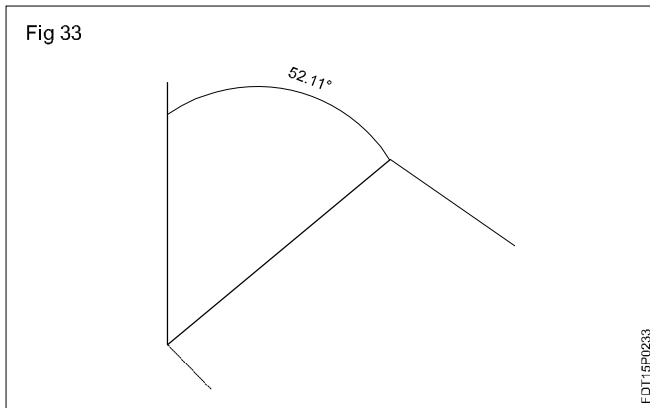
- 8 Drag to where you want the first line to end Fig 31.



- 9 Release the mouse, and position the pointer where you want the second line to end Fig 32.



10 Double-click when achieve the correct angle Fig 33.



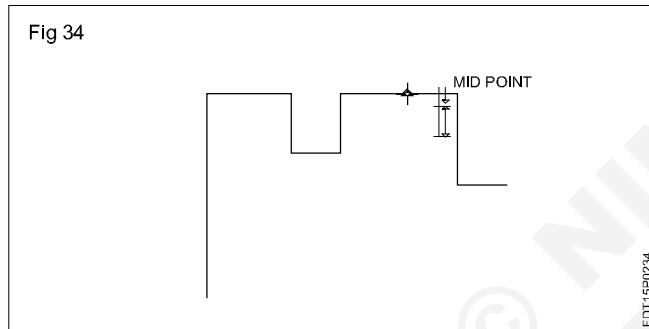
Segment Dimension tool - Display the distance between end nodes on single or multiple segments.

Drawing Segment dimension lines

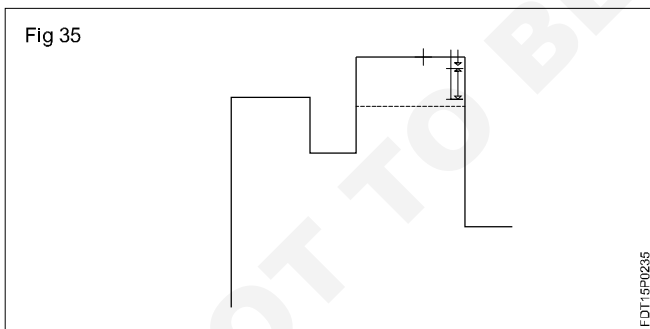


Segment dimension tool

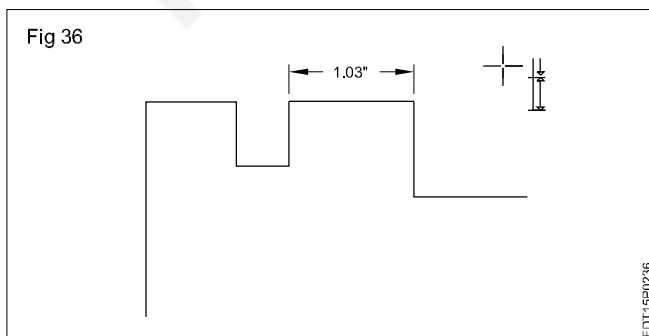
11 To draw a segment dimension line, click anywhere along the segment that want to measure Fig 34.



12 Move the pointer to where you want to position the dimension lines Fig 35.



13 Click where you want to place the dimension text Fig 36.



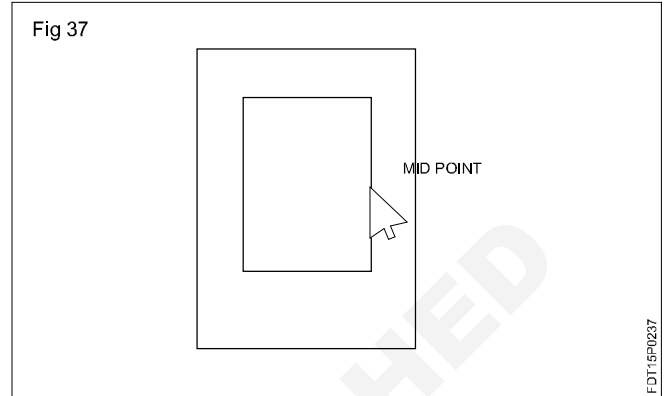
3-Point callout tool - Draw a callout with a two - segment leading line.

Drawing callouts

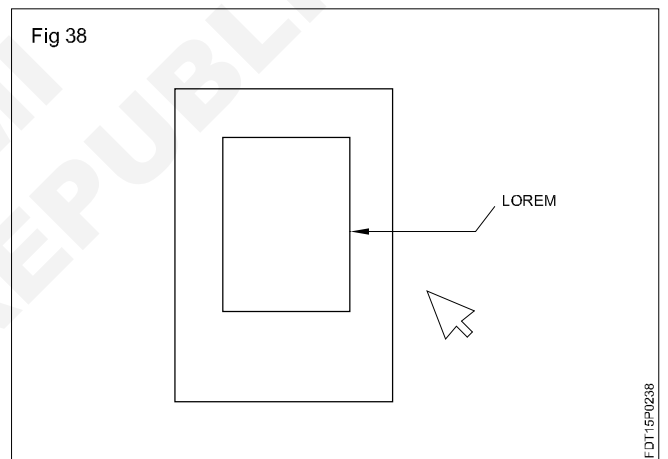


3-point callout tool

14 To draw a callout line, click where you want to place the arrow head Fig 37.



15 Drag the pointer to where you want to end the first line segment Fig 38.



16 Release the mouse, and then click to end to end the second line segment.

17 Type the callout text.

Straight - line connector tool - Draw a straight line to connect two objects.

Drawing straight connector lines



Straight - line connector tool

18 To draw a straight connector line, drag from an anchor point on the first object to an anchor point on the second object Fig 39.

19 To change the position of a connector line, selected a line by using the **Shape tool** and drag the node to a new location Fig 40.



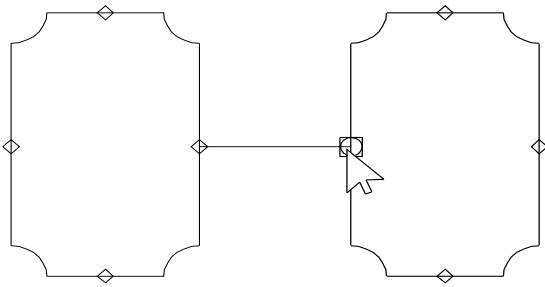
Right - Angle Connector tool - Draw a right angle to connect two objects.

Drawing right angle connector lines



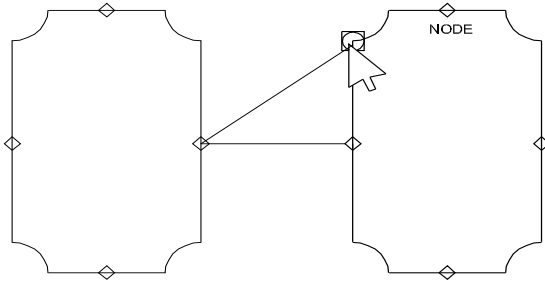
Right - angle connector tool

Fig 39



FDT15P0239

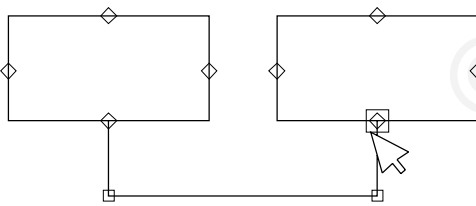
Fig 40



FDT15P0240

20 To draw a right - angled connector line, drag from an anchor point on the first object to an anchor point on the second object Fig 41.

Fig 41

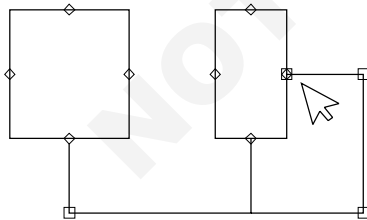


FDT15P0241

21 To change the position of a connector line, select a line by using the **Shape** tool and drag the node to a new location Fig 42.



Fig 42



FDT15P0242

Right - Angle Round Connector tool - Draw a right angle with a rounded corner to connect two objects.

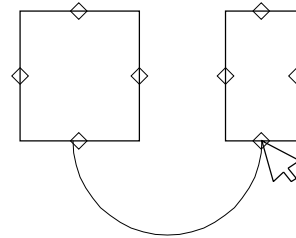
Drawing right angle round connector lines



Right angle round tool

22 To draw an right - angled round connector line, drag from an anchor point on the first object to an anchor point on the second object Fig 43.

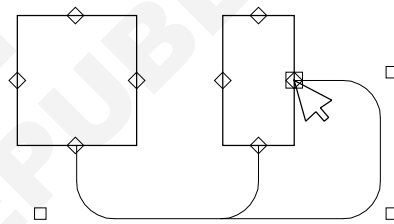
Fig 43



FDT15P0243

23 To change the position of a connector line, select a line by using the **Shape** tool and drag the nodes to a new location Fig 44.

Fig 44



FDT15P0244

Edit Anchor tool - Modify the connector line anchor points of objects.

Modifying connector lines



Edit anchor tool

24 To add an anchor point to an object, double -click anywhere on an object.

25 To move the anchor point anywhere along the perimeter of an object, drag the anchor point to another point on the perimeter.

26 To delete an anchor point, click the anchor point that you want to delete, then click the delete anchor button on the property bar.

Delete anchor button  on the property bar

Blend tool - Blend objects by creating a progression of intermediate objects and colors.

Special effect tools in corel draw

Objectives: At the end of this lesson you shall be able to

- create blending objects
- create effects
- create envelopes
- use color tool
- use interactive tool.

PROCEDURE

TASK 1: Create blending objects

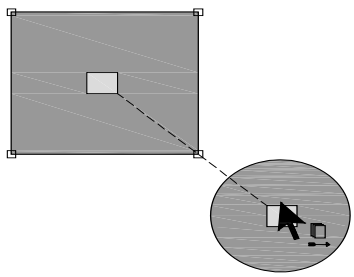
Blending objects



Blend tool

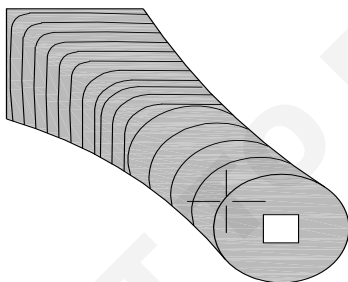
- 1 To blend two objects, drag from the first object to the second object, holding down Alt if you want to draw a free hand path for the blend Fig 1.

Fig 1



The first object is the start object of the blend, and the second object is the end object. The cursor changes when it is over an object that can be used in a blend Fig 2.

Fig 2



- 2 To adjust simultaneously the distance and color progression for the blend, move the slider.
- 3 To use the slider to adjust individually the distance and color progression for the blend, double-click the handles on the slider, and then move the handles.

You can also adjust blends by using the controls on the property bar.

Contour tool - Apply a series of concentric shapes that radiate into or out of an object.

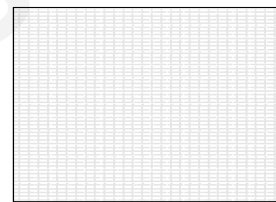
Contouring objects



Contour tool

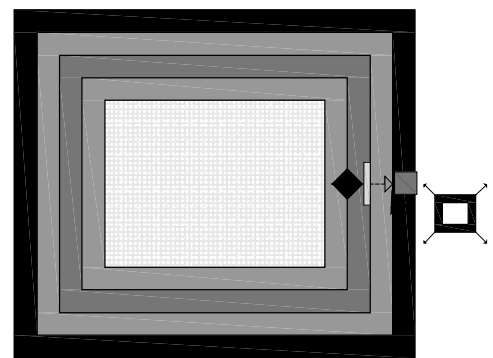
- 4 To contour an object, click the object, and then drag the start handle towards its centre (to create an inside contour) or away from it (to create an outside contour)
- 5 To adjust the number of steps and the degree of offset in the contour, move the slider Fig 3,4.

Fig 3



Before

Fig 4



After

- 6 To change the outline for the contour, drag a color from the color palette to the diamond-shaped handle.
- 7 To change the fill color for the contour, drag a color from the color palette to the square handle.


You can also adjust contour by using the controls on the property bar.

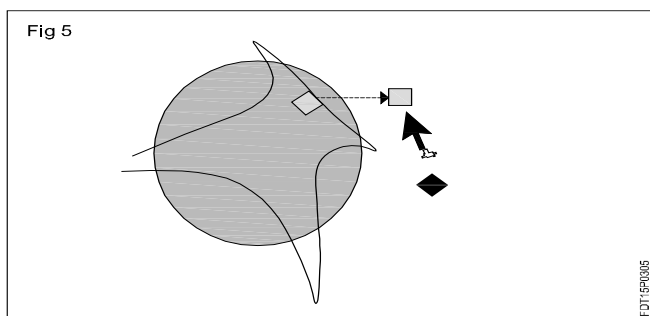
Distort tool - Transform object by applying Push and Pull, Zipper or Twister effects.



TASK 2: Create effects

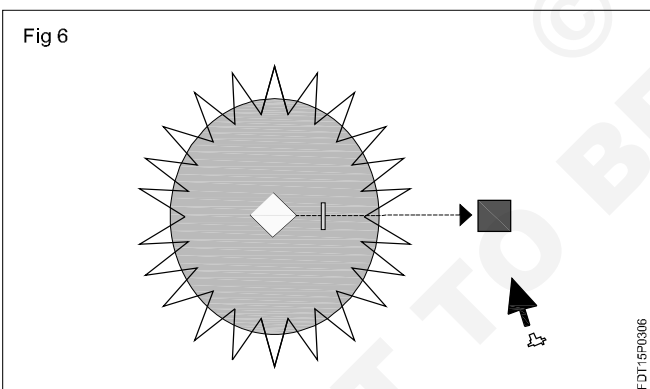
Applying distortion effect


Distort tool

- 1 To apply a push effect, click the Push and pull distortion button  on the property bar, and then drag the mouse until you are satisfied with the amount of push distortion Fig 5.

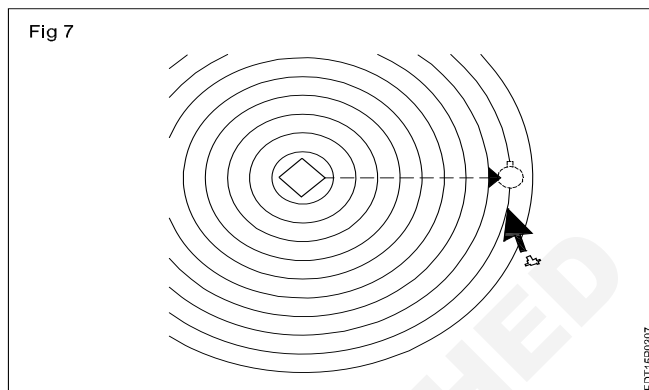


- 2 To apply a pull effect, click the push and pull distortion button  on the property bar, and then drag the mouse to the left until you are satisfied with amount of pull distortion.
- 3 To apply a Zipper effect, click the Zipper distortion button  on the property bar, and then drag the mouse to determine the amplitude of the zipper effect Fig 6.



- 4 To apply a Twister effect, click the Twister distortion button  on the property bar, and then drag the mouse in circles around the object. The closer you are to the object's border, the more dramatic the effect is. If you drag from the centre of the object, the Twister effect is more subtle.
- 5 To change the centre of distortion, drag the diamond-shaped position handle to a new location.
- 6 To adjust the number of points on a zipper distortion, move the slider.

You can also adjust distortion by using the controls on the property bar Fig 7.

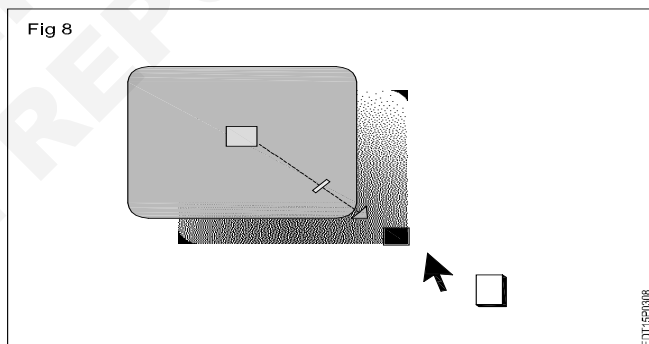


Drop shadow tool - Apply shadows behind or below objects.

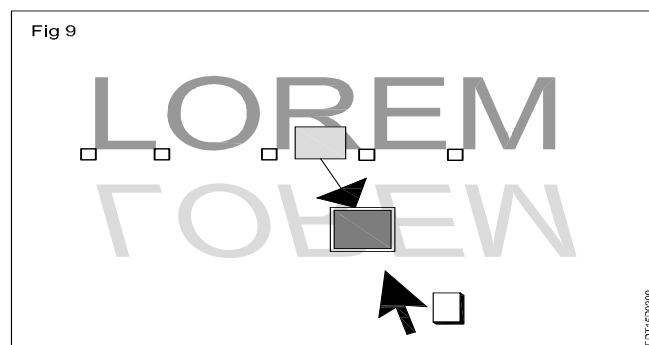
Adding drop shadows

Drop shadow tool

- 7 To add a drop shadow, click the object, and then drag the first object to where you want to place shadow Fig 8.



Drop shadow applied to an object Fig 9



- 8 Drop shadow applied to text.
- 9 To change the perspective of the drop shadow, drag the start handle.
- 10 To change the direction of the drop shadow, drag the end handle.

- 11 To adjust the opacity of the drop shadow, move the slider.
- 12 To change the color of the drop shadow, drag a color from the color palette to the end handle.





you can also adjust drop, shadows by using the controls on the property bar.

TASK 3: Create envelopes

Envelope tool - Change the shape of an object by applying and dragging the nodes of an envelope.

Applying envelopes

Envelope tool

- 1 To apply an envelope to a selected object, choose one of the following modes from the property bar, and then click the object:
- 2 Straight line, mode  - creates envelopes based on straight lines, adding perspective to objects.
- 3 Single-arc mode  - creates envelopes with an arc shape on one side, giving objects a concave or convex appearance
- 4 Double-arc mode  - creates envelope with an S shape on one or more sides
- 5 Unconstrained mode  - creates free form envelopes, which let you change the properties of the nodes, and add and delete the nodes
- 6 To shape the envelope, drag a node Fig 10



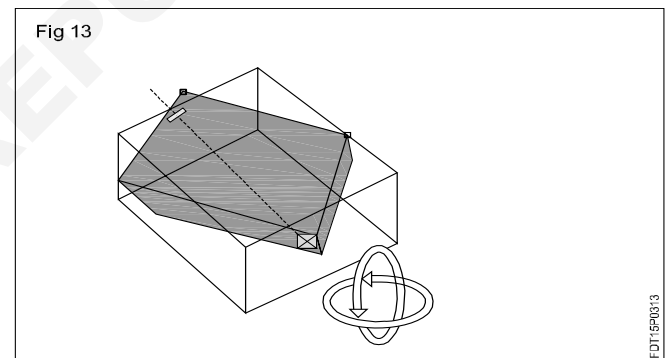
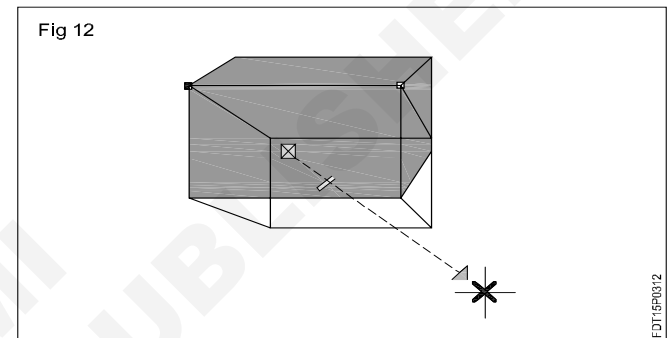
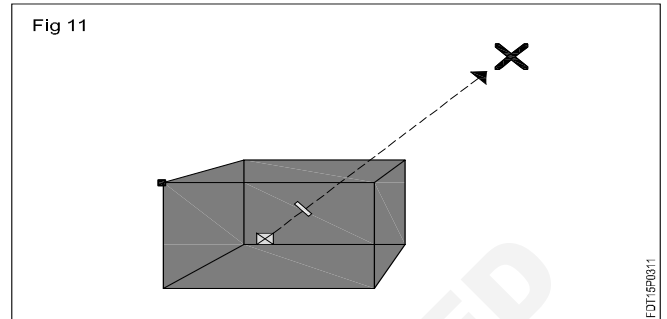
You can also adjust envelopes by using the controls on the property bar.

Extrud tool - Apply 3D effect to object to create the illusion of depth

Creating extrusion

Extrude tool

- 7 To create an extrusion, drag the object in the direction in which you want to project the three-dimensional extrusion Fig 11
- 8 To adjust the depth of the extrusion, move the slider Fig 12.
- 9 To change the direction of the extraction, drag the X-shaped perspective handle.
- 10 To rotate an extrusion, double-click it to display its rotation handles, and then drag any rotation handle Fig 13.



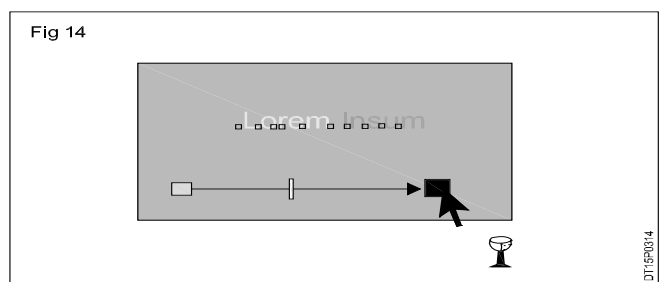
You can also adjust extrusions by using the controls on the property bar.

Transparency tool - Partially reveal image areas underneath the object.

Applying transparencies

Transparency tool

- 11 To apply a transparency to an object, select the object with the transparency tool, and then drag across the object Fig 14.

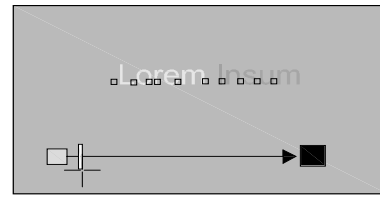


The appearance of the transparency varies depending on where you first click, the direction in which you drag, and the distance that you drag.

- 12 To set where you want the transparency to start, drag the start handle. (The start handle is white by default)
- 13 To set where you want the transparency to end, drag the end handle. (The end handle is black by default)
- 14 To adjust the progression of the transparency, move the slider Fig 15.
- 15 To change the intensity of the transparency, drag a color from the color palate to the end handle. The lighter the color, the more opaque the resulting transparency Fig 16.

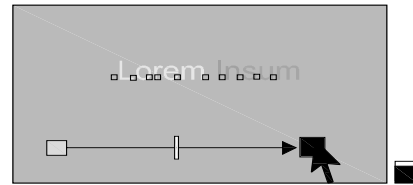
You can also adjust transparencies by using the controls on the property bar.

Fig 15



FD15P0315

Fig 16



FD15P0316

TASK 4: Use color tools

Color Eyedropper tool - Sample colors, and apply them to objects.

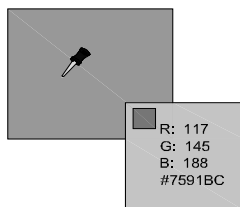
Sampling and applying color



Color eyedropper tool

- 1 To sample a color from an object, click the color eyedropper tool from the toolbox, and click **Select from Desktop** on the property bar if required.
- 2 Click the color that you want to sample Fig 17

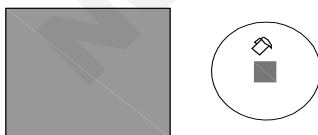
Fig 17



FD15P0317

- 3 To fill an object with a sampled color, wait for the color eyedropper tool to switch to **Apply color** mode, then hover over an object until a solid color swatch appears, and click to apply the color Fig 18.

Fig 18



FD15P0318

- 4 To outline an object with a sampled color, you can hover over the object's outline until the outline swatch appears, and click the object's outline Fig 19.

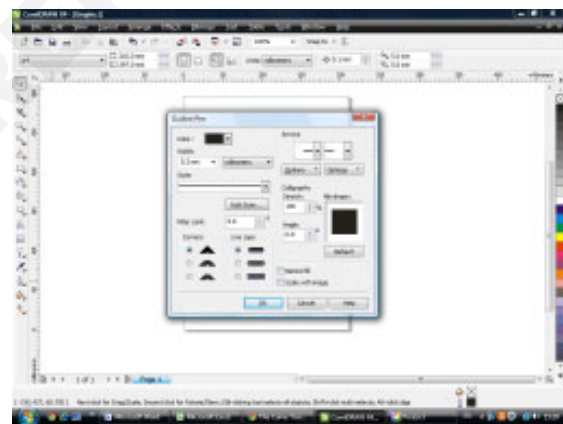
Outline Pen (F12) - Set outline properties such as line thickness, corner shape, and arrow type Fig 20.

Fig 19



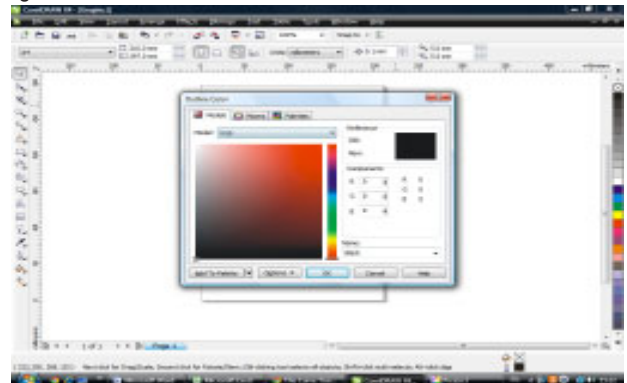
FD15P0319

Fig 20



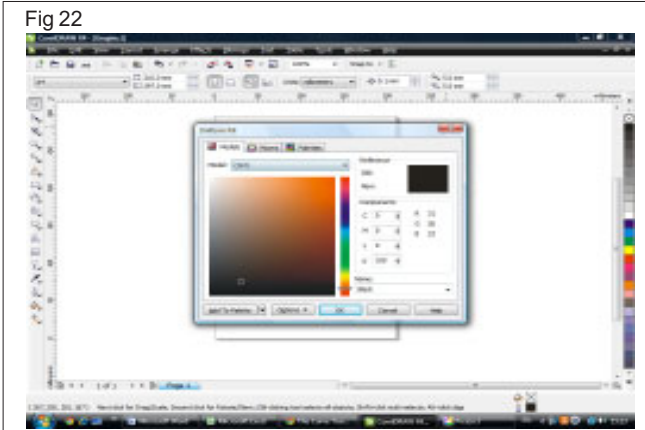
Outline color (Shift + F12) - Choose the outline color by using color viewers and color palettes Fig 21.

Fig 21



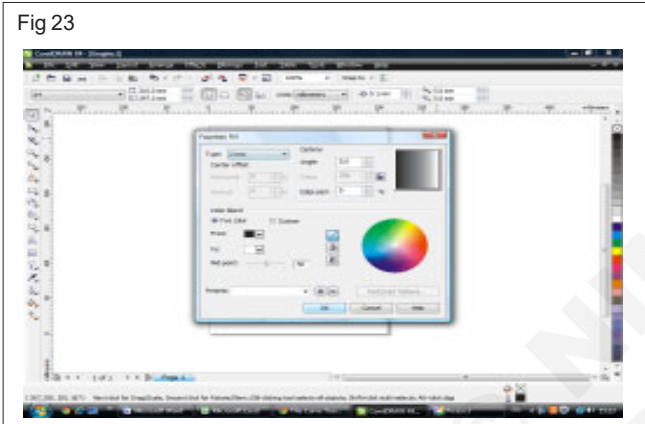
Uniform Fill (Shift + F11) - Choose a solid fill color for an object by using color palettes, color viewers, color harmonies, or color blends Fig 22.

Fig 22



Fountain Fill (F11) - Fill an object with a gradient of color or shades Fig 23.

Fig 23



Pattern Fill - Apply a preset pattern fill to an object or create a custom pattern fill Fig 24.

Texture Fill - Apply preset texture fills to objects to create the illusion of a variety of texture, such as water, clouds and stone Fig 25.

PostScript Fill - Apply an intricate PostScript texture fill to an object Fig 26.

Fig 24

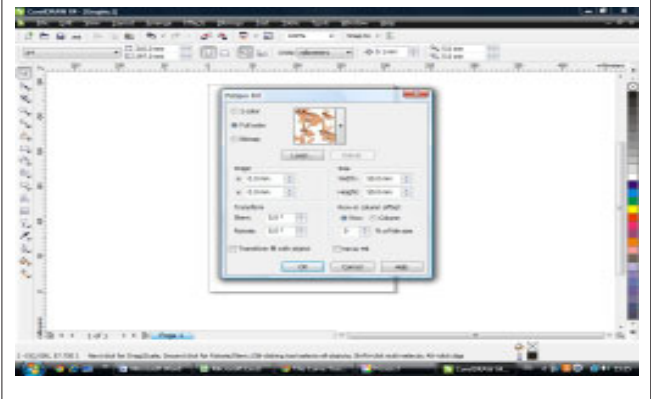


Fig 25

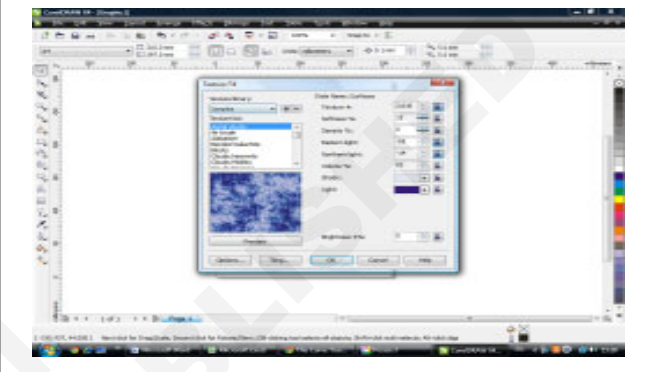
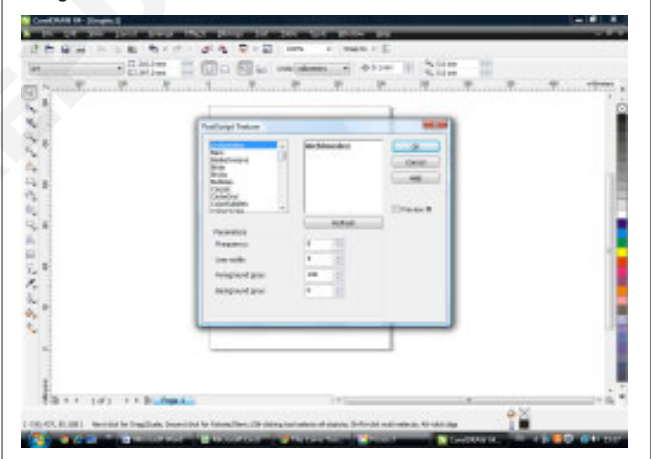


Fig 26



TASK 5: Use interactive tool

Interactive Fill tool (G) - Create a fill dynamically by using markers in the drawing window and property bar to change the angle, midpoint and color.

Applying fills interactively



Interactive fill tool

- 1 To apply an interactive fill to an object, click the object, and then drag Fig 27.
- 2 To adjust the progression of a fountain fill, drag the slider Fig 28.
- 3 To adjust the angle of a fountain fill, drag the end point Fig 29

Fig 27

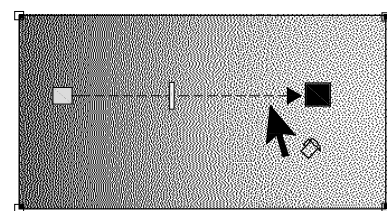
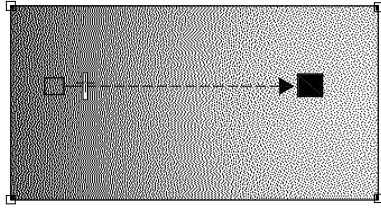
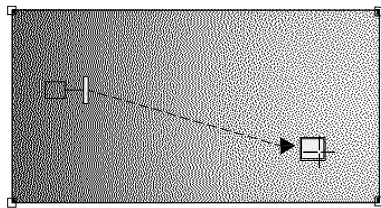


Fig 28



FDT15P0328

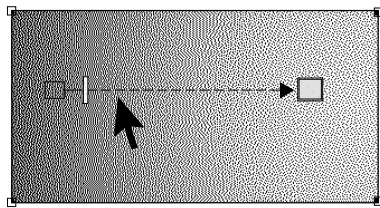
Fig 29



FDT15P0329

- 4 To change the intermediate color of a fountain fill, drag a color from the color palette to the fill path Fig 30.

Fig 30

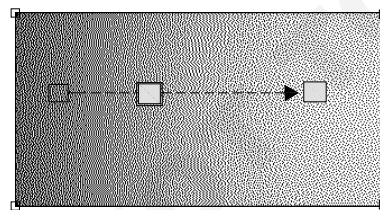


FDT15P0330

- 5 To change the start or end color of a fountain fill, drag a color from the color palette to the star or end handle

You can also adjust fountain fills by using the controls on the property bar Fig 31.

Fig 31



FDT15P0331

- 6 You can also use the property bar to apply other fills that you can adjust interactively, such as pattern fill and texture fills
- 7 Mesh fill tool (M) - Fill an object by blending multiple colors or shades arranged over a mesh grid.

More info

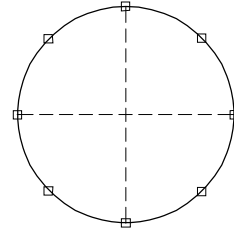
Applying mesh fills



Mesh fill tool

- 8 To add the mesh grid, click the object Fig 32.

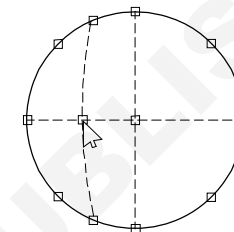
Fig 32



FDT15P0332

- 9 To add rows or columns to the mesh grid, type values in the **Grid size boxes** on the property bar or double-click in the object Fig 33.

Fig 33

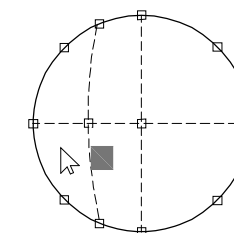


FDT15P0333

- 10 To change the color of a grid, drag a color from the color palette to the grid.

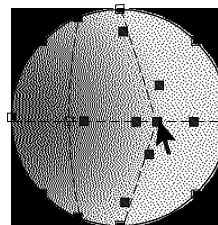
- 11 To adjust the nodes in the grid, click the shape tool in the toolbox and drag nodes across the object Fig 34,35.

Fig 34



FDT15P0334

Fig 35



FDT15P0335

Methods of removing different kinds of stains in fabrics

Objectives: At the end of this exercise you shall be able to

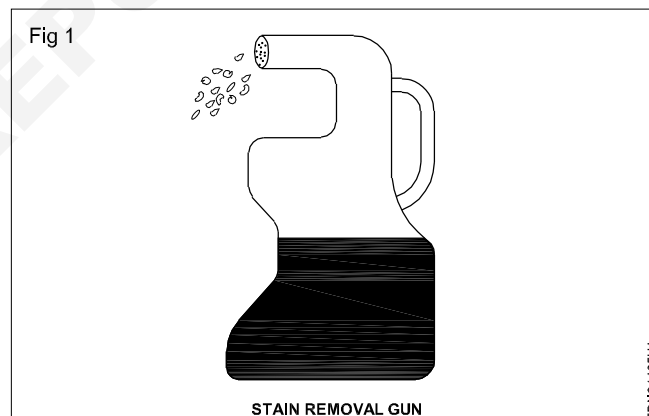
- removes pencil stain mark by using gun
- removes chewing gum stain by using gun
- tea/coffee stains removed by using stain removal machine
- removes haldi stain
- removes protein stain from the fabric surfaces.

Requirements			
Tools/Instruments			
• Stain removing gun	- 1 No.	• Plastic boy	- 1 No.
• Eraser	- 1 No.	• Tweezer	- 1 No.
• Table	- 1 No.	• Ice cubes	- as reqd.
		• Cotton	- as reqd.
Materials		• Borax	- as reqd.
• White soap water	- 1 No.	• Grease solvents	- as reqd.
• Warm & cold water	- 1 No.	• Chloroform liquid	- as reqd.
• Gum	- 1 No.	• Hypo chloride bleach	- as reqd.

PROCEDURE

TASK 1 : Remove a pencil stain mark by using gun (Fig 1)

- 1 Take the shirt and place it on the table, start checking the stain which appears in the shirt.
- 2 Place the small piece of fabric under the stain area use the gum eraser to lift the shirt and starts rubbing the stained area.
- 3 After rubbing stained area apply the soap water by using the gun.
- 4 Take and hold the shirt away from the table as well as close to the gun.
- 5 After removing entire stain from shirt apply the water, wash the entire area.
- 6 Allow the shirt for drying for 10 minutes, then remove the shirt for the stained area.
- 7 Repeat the same procedure for the other sample.

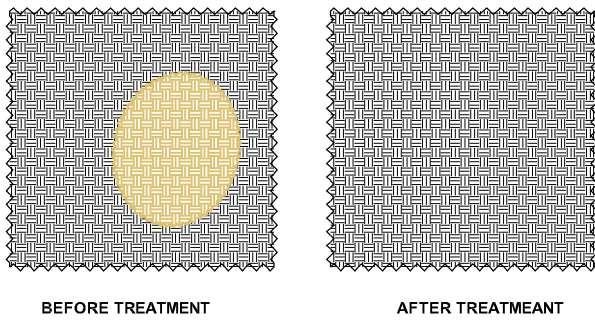


Using a stain removal gun practices more and apply to affected area.

TASK 2 : Remove a gum stain by using gun (Fig 1)

- 1 Place the cloth in a plastic bag with the gum stain facing the outside.
- 2 Place the ice cubes on the gum stain area. This process allow gum to harden.
- 3 Remove the ice cubes from the strained area and use the Tweezer to pick up the harden gum.
- 4 After removing the gum from the cloth use the liquid soap water by using gun.
- 5 Rub the cloth by using cotton until the entire gum removed from the cloth.
- 6 Use the hot water to stained area more than 3 times.
- 7 Apply the soap water to affected area.
- 8 Finally use the water to removing the soap from stained area.
- 9 Allow the cloth for drying 15 to 20 minutes.

Fig 1

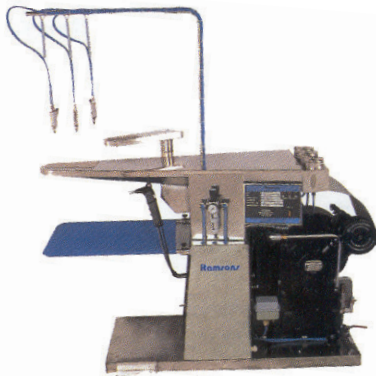


- 10 Repeat the same procedure for the other sample during the practical sessions.

TASK 3 : Remove tea/coffee stain by using stain removal machine

- 1 Place stained components (Tea, coffee) on the table.
- 2 Cover the stain area with borax. (Fig 1)

Fig 1



- 3 Sponge the cloth with cover with borax.
- 4 After sponge use the stain removing machine gun and apply the hot water.
- 5 Pouring the hot water on the stained area, pouring the water should be high penetration.
- 6 Remove the borax and use the liquid soap water by using the gun.
- 7 Finally use the water by spraying on the stained area.
- 8 Using the dry on stained removed place.
- 9 Allow for drying 10 to 15 minute.

Repeat the same procedure on the silk and polyester fabric.

TASK 4 : Remove a oil or grease stained by using stain removing machine

- 1 Place the oil (or) grease stained components on the stain removing machine table. (Fig 1)

Fig 1



STAIN REMOVING MACHINE

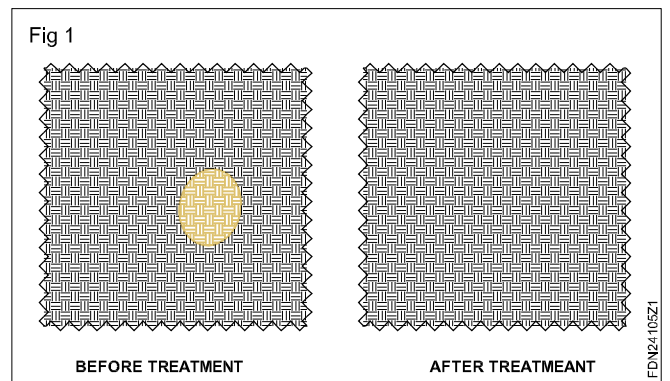
- 2 Apply the grease solvents liquid by using stain removing machine.
- 3 After applying the stain removal solvent.
- 4 Allow the solvents to stays in the stained area for 1 minute.
- 5 After 1 minute using the water on the grease solvent by using the gun.
- 6 After removing entire oil stain from the cloth.
- 7 Use the soap water by using gun to give high penetration.
- 8 Finally apply the water 2 (or) 3 time with gun.
- 9 Allow the cloth to dry 15 to 20 minute.

Repeat same procedure on cotton and linen fabric.

TASK 5 : Remove a protein stain (Fig 1)

- 1 Protein stain cloth place it on the table.
- 2 Use the hypochlorite Bleach liquid on the (Blood) area.
- 3 Applying stain removal solvent have within the affected area.
- 4 After apply the stain removal solvent allow for the stays in the cloth 2 minute
- 5 Use the cold water and remove the hypochlorite solvent from the cloth
- 6 Apply the cold water 3 to 4 time until the solvent completely removed from the stained area.

Repeat the same procedure on the cotton fabric practice for 2 to 3 times.



Checking the measurement of garments

Objectives: At the end of this exercise you shall be able to

- check measurement of garments
- check the seams of the garments
- identify stains on the garments
- check the quality of garments.



Scan the QR Code to view the video for this exercise

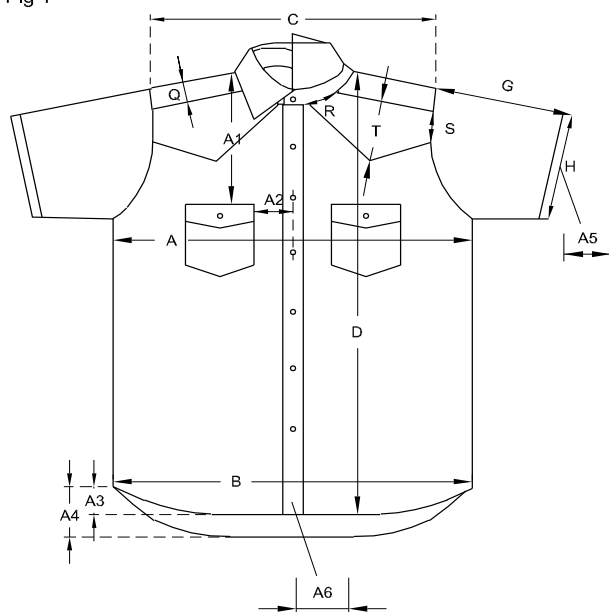
Requirements			
Tools/Instruments		Materials	
• Checking table	- 1 No.	• Fault sticker	- 1 No.
• Trimmers	- 1 No.		
• Measuring table	- 1 No.		
• Scissors	- 1 No.		

PROCEDURE

TASK 1 : Checking the measurement of garments

- | | |
|---|---|
| <p>A Measure : Chest round from Armhole pitch to another armhole pitch.</p> <p>B Measure : Bottom round from end of the Bottom line to opposite side end of the Bottom line.</p> <p>C Measure : Shoulder length from cap of the sleeve to another cap of the sleeve.</p> <p>D & E Measure: High point shoulder from the Hps to till the Bottom line. (Fig 1)</p> <p>F Measure : Armhole round Measure the armhole curve along with the armhole shape</p> <p>G Measure : Sleeve length from cap of the sleeve to Bottom line.</p> <p>H Measure : Sleeve opening from the Bottom of sleeve round to end of the side seam.</p> <p>I Measure : Neck width from Hps to another Hps straight across the line</p> <p>J Measure : Back Neck drop from centre of Back to till seam end.</p> <p>K Measure : The Front neck drop from Hps to till the front Neck line.</p> <p>L Measure : Band width from the centre of the Neck band to seam line.</p> <p>M Measure : Collar outer line from outside collar point tip to opposite collar point tip.</p> <p>N Measure : Collar height from centre of collar top to till the seam line.</p> <p>O Measure : Neck round B to BH from half of the button to half of the button hole.</p> | <p>P Measure : Collar point from the tiled area of the collar.</p> <p>Q Measure : Front forward from Hps to shoulder seam line.</p> <p>R Measure : Yoke length front centre front neck to yoke length.</p> <p>S Measure : Yoke length from yoke side to yoke length.</p> <p>T Measure : Yoke length from centre of the yoke to yoke seam line</p> <p>U Measure : Back yoke length from the centre of neck line to end of the yoke seam. (Fig 2)</p> <p>V Measure : Back yoke side length. Measure from the top arm hole to yoke side length.</p> <p>X Measure : Pocket length from the top of pocket to till Bottom line.</p> <p>Y&Z: Measure the pocket mouth from the top of the pocket till seam of the pocket mouth.</p> <p>A₁ Measure : Pocket location from the Hps to pocket line.</p> <p>A₂ Measure : Pocket location from the centre front to pocket.</p> <p>A₃ Measure : Bottom hem from the Bottom line 3½" upward.</p> <p>A₄ Measure : Back tail from centre Back Bottom line 5½" upward measurements.</p> <p>A₅ Measure : Sleeve hemming from seam 1¼" fold to till the seam line.</p> <p>A₆ Measure : Placket width from the centre front seam to seam.</p> |
|---|---|

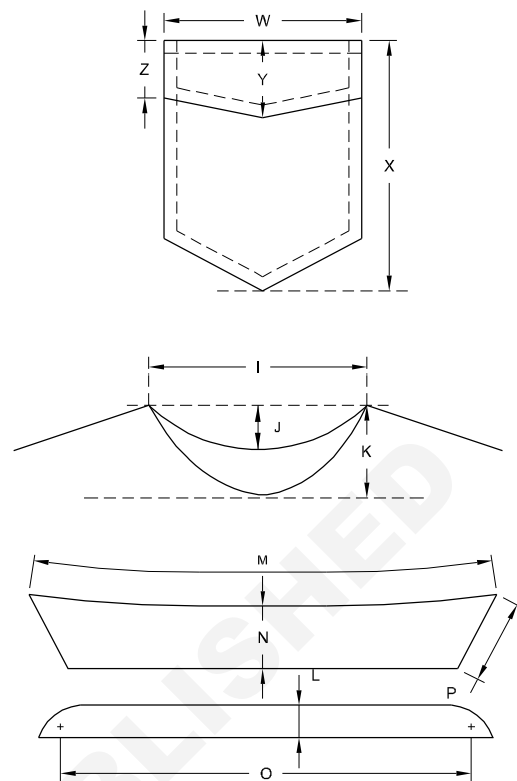
Fig 1



CHECKING TABLE

FDN24-103H1

Fig 2



CHECKING TABLE

FDN24-103H2

TASK 2 : Take the measurement for trouser as per spec sheet

General rules for taking the measurements

General Guide lines

- Each measurement point is numerically coded.
- A definition and illustration is given by marking the arrows how each measurements taken.
- Garment should be measured on a clean, Flat, Smooth, Surface and should not be placed on top of other garments, fabric, carpet, or other surface that may distort the garments.
- Garments should be gently smoothed of all wrinkles and laid completely flat on the table.
- All measurements are taken on the front of garment with buttons and zippers fully closed, unless otherwise stated.
- All measurements are taken on the wearer's either left (or) right side of garments and both side of the garments should be identical within the tolerance.
- For all buttoned garments. Button should be at the end of Button hole for any circumference measurements.
- Button spacing should be measured from centre of Button to centre of Button.
- Use a soft and fiber glass tape measure is standard for menswear. Tape must periodically evaluated for accuracy against a metal ruler.
- All elastic stretcher measurements are done until the fabric lays flat. The fabric should not be distorted & elastic extended to its ultimate width.
- If there is difference of measure method stated on the spec sheet, the spec sheet over - rides the manual.

12 A numerical index and index by classification are located in the front of the manuals.

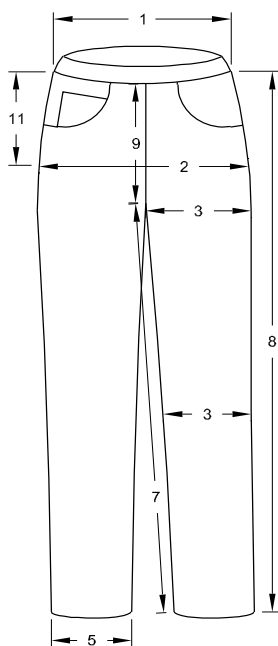
TASK 3 : Measure garments based on the given specification

- 1 Measure the waist width 1 from the side front to side front.

There should not be any wrinkle presents in the garments.

- 2 Measuring the seat round 2 measurements from 8" down from the waist line measure straight across the line.
- 3 Measure the front crotch line 3 from the crotch pitch to side seam from straight across the line. (Fig 1)

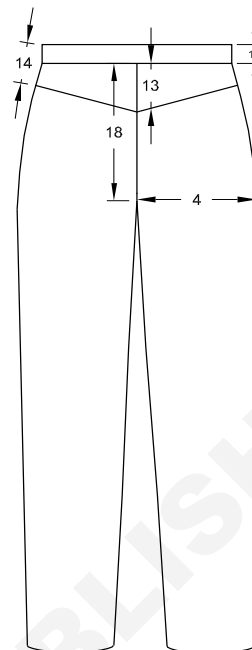
Fig 1



FDN24-103J1

- 4 Measure the back crotch measurements 4 from back crotch line to back side seam.
- 5 Measuring the knee line measurements 5 from the mid of the leg length straight across the line.
- 6 Measure the bottom round 6 from front bottom side seam line straight across the side seam line.
- 7 Measure the in seam measurement 7 from the crotch to Bottom end measurements.
- 8 Measure the out seam 8 measurement from the waist band (top of the waist band) to end of the trouser.
- 9 Measure front rise measurements from 9 centre front line to crotch pitch point
- 10 Measure the back rise 10 measurement from centre back line to back crotch pitch point.
- 11 Measure the seat location 11 from the top of waist band 8" down from waist to seat line.
- 12 Measure the waist belt width 12 from the side seam top of waist belt to end of waist belt. (Fig 2)

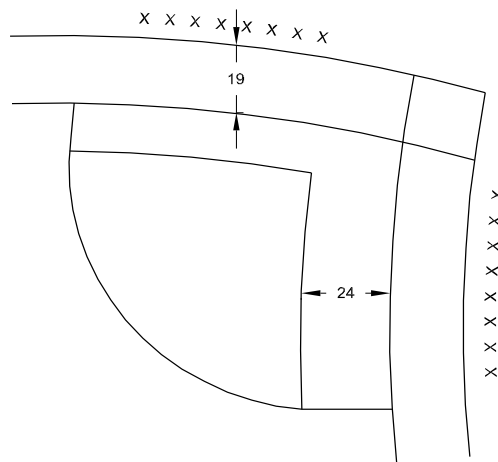
Fig 2



CAP621H1(a)

- 13 Measure the yoke length 13 from top of waist band A" down from waist line.
- 14 Measure the yoke side seam measurements 14 from side top of waist 2" down from waist line.
- 15 Measure the coin pocket 15 from top of waist to 1½" waist line to pocket.
- 16 Measure the coin pocket side measurements 16 from side seam front to win 1" pocket.
- 17 Measure the front side pocket 17 from side seam 2½" to side pocket.
- 18 Measure the front pocket length 18 from the top of waist line 3" down top of waist line to pocket. (Fig 3))

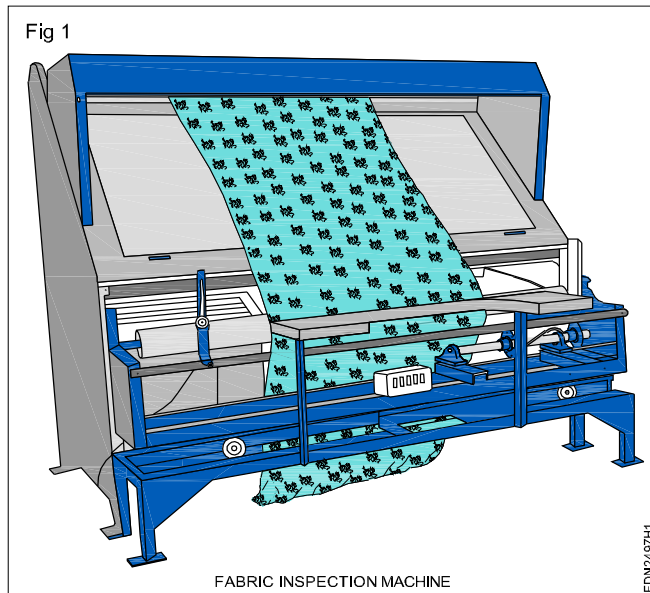
Fig 3



FDN24-103J3

TASK 1 : Identify defects and removal of oil and soiled ends

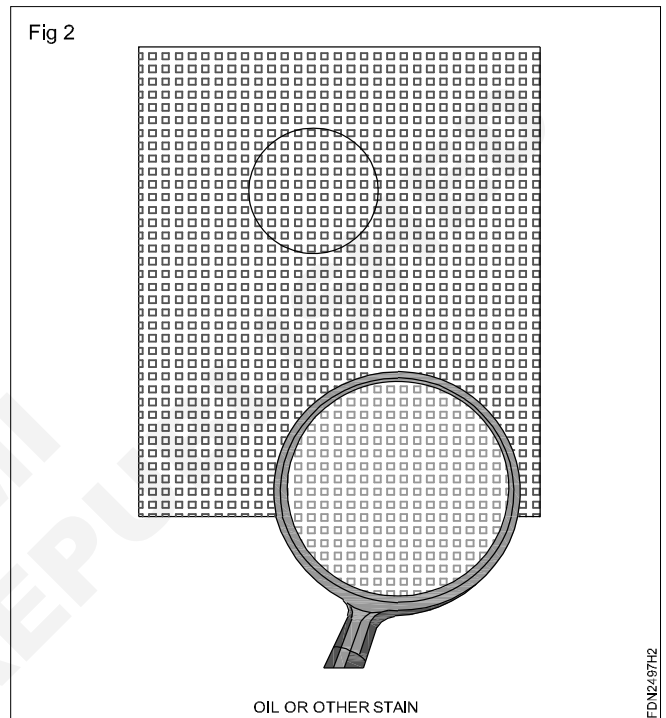
- 1 Check the fabric having the length 140 yard's and width of 48 inches.
- 2 Start checking the fabric with the help of fabric inspection machine. (Fig 1)



- 3 The fabric surface having the oil and soiled ends stop the machine
- 4 Put the fabric defect sticker on the defected area.
- 5 Put the fabric clips on the affected area.
- 6 Before removing stain sticker are removed from the stained area.
- 7 Hold the fabric tightly using the spotting gun.
- 8 To remove the stain spray the stain removal solvent around the stained area.
- 9 Spray solvent on the fabric evenly

Based on the fabric structure, dyes the pressure of gun, and solvent can be adjusted.

- 10 Spray the solvent unless the stain is completely removed from the fabric.
- 11 Allow the fabric to dry
- 12 Then remove the clips from fabric
- 13 The stain are prominent it can be considered as major defects in the fabric. (Fig 2)



TASK 2 :Stitching

Stitching on the garments

- 1 Place the garment on the table
- 2 Lift the shirt with the left hand and turn it inside out
- 3 Sew left and right side
- 4 Check whether the stitches are collar and shoulder.
- 5 Check whether the stitches are cuff and placket, button
- 6 Check the stitches are yoke and sleeve.
- 7 Turn the right side of the shirt and check the button, button hole and pocket.
- 8 Finally check the seams of the short.
- 9 Check button hem is correct.
- 10 The method for all garments.

Defects and their causes

The defects (Flaws) can be classified into six board groups

- 1 Yarn defects
- 2 Weaving defects
- 3 Piling and raising defects
- 4 Processing defects
- 5 Fabrication defects
- 6 Make up defects

Yarn defects

- 1 Slub:** Slub is a bunch of fibers having less twist/no twist and having larger diameter compared to normal span yarns.

The slab will give undesirable appearance in the fabric (other than fancy slubby yarn fabrics where in slab is novelty)

Causes

- Improper carding/combing
 - Improper piecing in drawing and roving
 - Improper cleaning of the cans holding the silver resulting in carrying of the soft waste
 - Improper cleaning schedule of top rollers and clearance in drafting, roving and ring frame.
 - Broken tooth in the chain of gear system. Failure of pneumatic suction system.
 - Frames not properly cleaned after floor sweeping resulting in flying lints.
 - Careless piecing of the ends – down at the ring frame
- 2 Slubby weft:** Occurrence of slubs of frequent intervals in weft yarn

Causes

- Same as that of slubs
- 3 Coloured flecks:** Presence of coloured foreign matter in the yarn.

Causes

- Contamination of yarn during ginning stage due to leaves. Seed coat, immature fibre, yellow fibre, tie yarn etc. Which gets embedded into the fabric at the time of the weaving.
- 4 Knots:** Piecing of broken threads with tail end or improper knotting.

Causes

- When the threads breaks during the process of winding, warping, sizing and weaving if the knotting machines not used it results in long tail and or thick knot

Weaving defects

- 1 Missing ends:** The fabric is characterized by a gap parallel to warp. The number of ends missing may be one or more.

Causes

- 1 Loom not equipped with warp stop motion.
- 2 Drop wired dirty accumulation of lint may prevent their dropping
- 3 In electric warp stop motion the electro bars are dirty or corroded.

- 4 Bent or broken drop wires

- 5 Even when the loom is equipped with warp stop motion the sized beam is such that it cannot be woven with warp stop motion on. This is in case of

- g soft beam
- h and
- g damp beam
- h or wet beam

- 6 Excessive warp breaks

- 7 The weaver is careless is not lying the end in time

- 8 The basic yarn is of poor strength for the quality of fabric woven.

- 2 Oily or soiled ends:** These are oily or soiled warp threads of longer length frequently seen at short intervals

Causes

- Handling and storing in the spinning department is not paper.
- Oil contaminated guides and soiled hands during the process of warping.
- Improper handling of the warp beams.
- Oil dropping during the process of oiling the loom and its accessories.
- Drop pins in the warp stop motion containing oil.

- 3 Float:** Improper interlacement of warp and weft threads in the fabric over a certain area.

Causes

- Healds touching each other causing some ends to remain up.
- Shed not divided properly resulting the shuttle to leave some ends up.
- Broken healds
- Tight ends in weaver is beam cause a few ends to remain up than normal warp.
- Heald strap slack
- Heald hanging a cotton fluff between warp layers
- Broken end entangled with other ends
- Broken heald eyes
- Improper sizing the ends sticking
- Crosses – ends from sizing or in loom shed.

Selvedge defects: The different defects appearing at the selvedge. In – house training on visual quality inspection.

Causes

- Difference in picking force which causes pulled – in/ wave selvedge
- Improper drawing and tension of the selvedge ends
- Temple roller not functioning properly. In correct balance of cloth structure between the body and selvedge yarn.

Double ends (Multiple ends)

Two or more ends unintentionally weaving as one this defect is characterized by a thick bar running parallel to the warp.

Causes

- 1 Mixing up of threads during process of spinning/ winding/warping/sizing.
- 2 Wrong drawing taking more ends in heald eye or reed dent.

Corrective measures in garmenting

Objective: At the end of this exercise you shall be able to

- check the corrective measures of garments.

Name of defect	Root causes	Corrective action plan	Preventive action plan
Broken stitch	Due to trimming problem	Operator should careful about trimming	We train up our operator about proper trimming
	Due to thread stability problem	We have to carefully check thread stability	Alert to be check thread stability
Skip stitch	Needle problem	Change needle randomly after 2 ltrs	Train up the operator
	Due to improper machine adjust problem	Mechanic properly setup to avoid skip stitch	We aware our operator about how to avoid skip stitch
Uneven/Wavy stitch	Operator careless sewing	Operator should careful about their sewing operation	We should train up our operator about proper sewing process
Cracked stitches	Improper machine adjustment	Stop the machine & ensure proper machine adjustment	Mechanics must check the machine condition before starting sewing
	Due to less thread stability	Operator have to carefully check thread stability after sewing by stressing seam line	We should train up our operator how to check seam elasticity
Open seam	Operator handling problem	Operator shall be work carefully	We are training our operator about how to work in a proper way
	Operator did not follow M/C guide in properly	They will be follow the M/C guide properly and they ensure proper seam line	We are training our operator about how to proper use of machine guide.

Make marker on different width, texture and design for garment

Objective: At the end of this exercise you shall be able to

- make marker for a shirt using plain fabric
- make marker for a shirt using striped fabric
- make marker for a shirt using plaid fabric
- make marker for a shirt using one way fabric
- make marker for a frock using plain fabric
- make marker for a blouse using plain fabric
- make marker for a trousers using plain fabric.

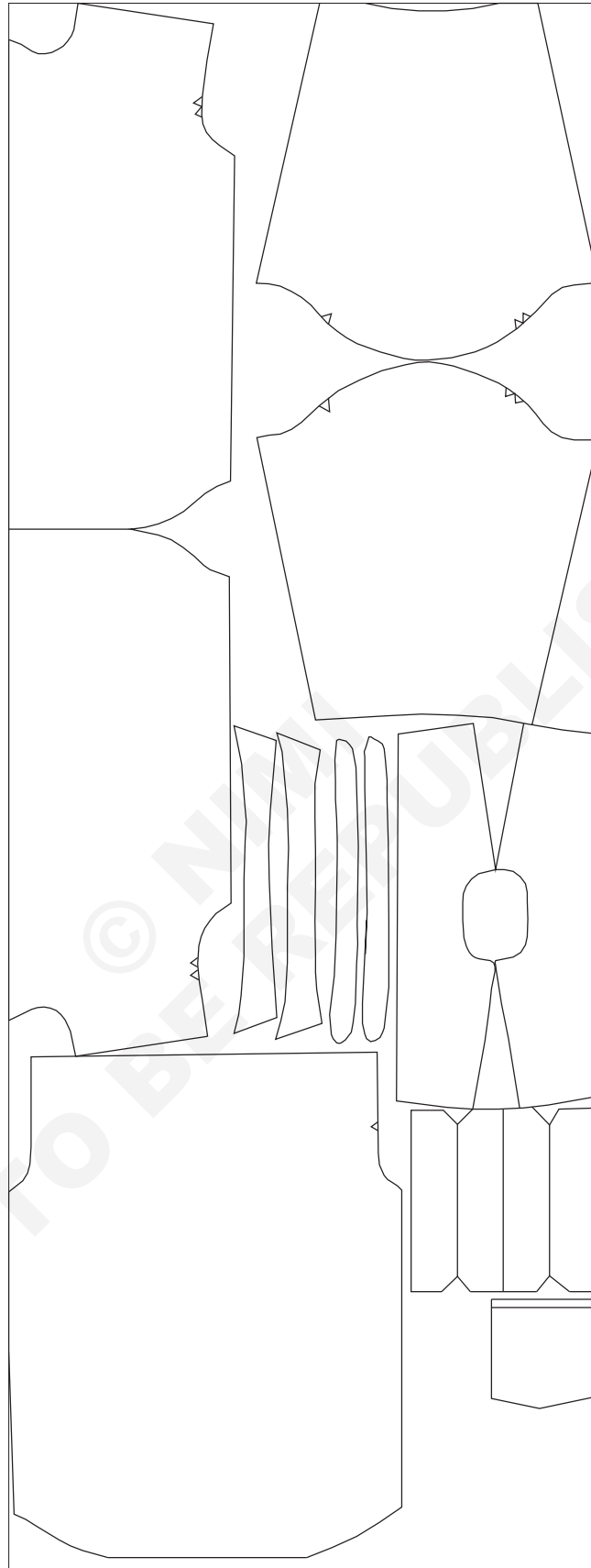
Requirements			
Tools / Instruments			
• Cutting table	- 1 No.	• Plaid(Checked designed fabric)	- 3 m.
• Metre scale	- 1 No.	• Printed one way fabric	- 3 m.
• Measuring tape	- 1 No.	• Pattern set for gent's shirt	- 1 No.
• Pattern weights	- 1 No.	• Marking chalk	- 1 No.
Materials			
• Plain poplin fabric	- 3 m.	• Pattern set for blouse	
• Striped fabric	- 3 m.	• Pattern set for frocks	
		• Pattern set for trouser	

PROCEDURE

TASK 1: Make marker for a shirt using plain fabric

- 1 Place the plain fabric on the cutting table.
- 2 Make the fabric ready for layout and lay the shirt patterns on the fabric economically.
- 3 Try different layouts and choose the best one which gives the least fabric consumption. (Minimum Lay length). (Fig 1)
- 4 Mark the outlines of the patterns with the help of the marking chalk.

Fig 1

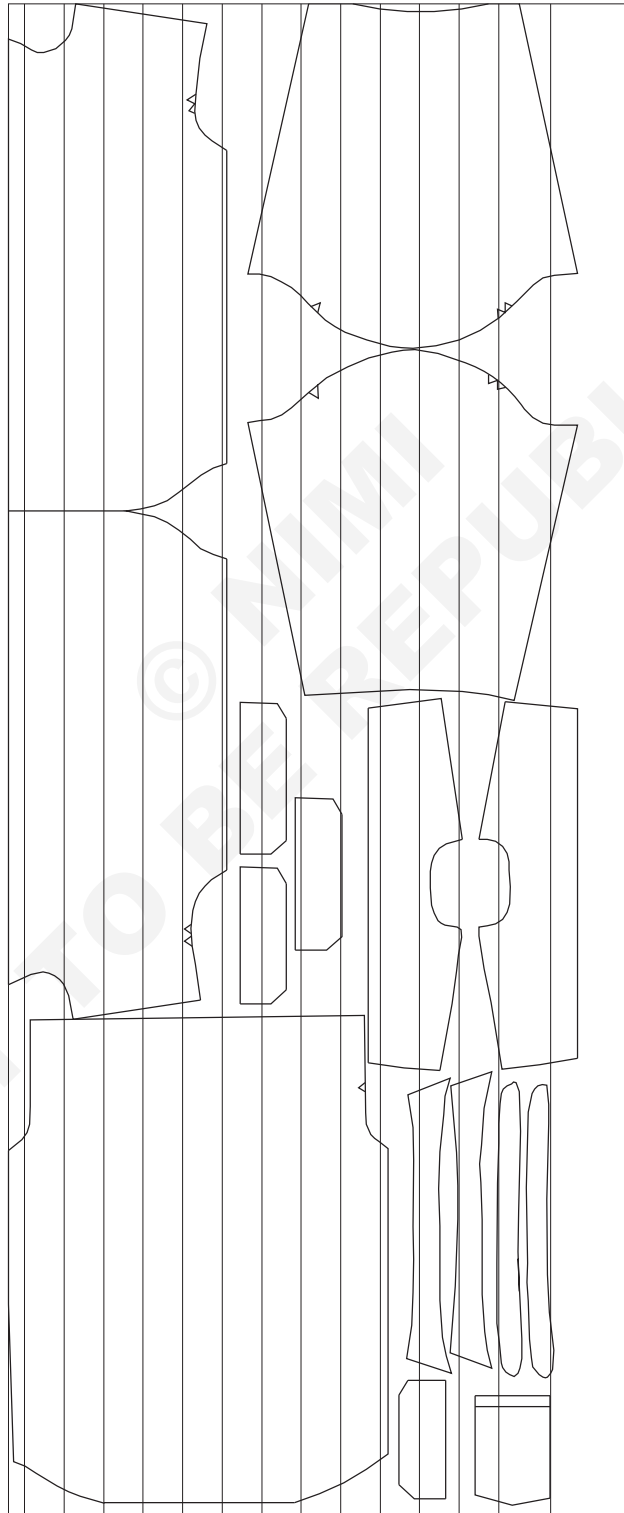


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TASK 2: Make marker for a shirt using striped fabric

- 1 Place the striped fabric on the cutting table.
- 2 Make the fabric ready for layout and lay the shirt patterns on the fabric economically.
- 3 Lay the two front patterns one below the other so as to obtain the line matching properly on the both the fronts. Follow this for sleeves also.
- 4 If possible, place the pocket pattern below the left front so as to get the line matching.
- 5 Try different layouts and choose the best one which gives the least fabric consumption. (Minimum Lay length). (Fig 1)
- 6 Mark the outlines of the patterns with the help of the marking chalk.

Fig 1

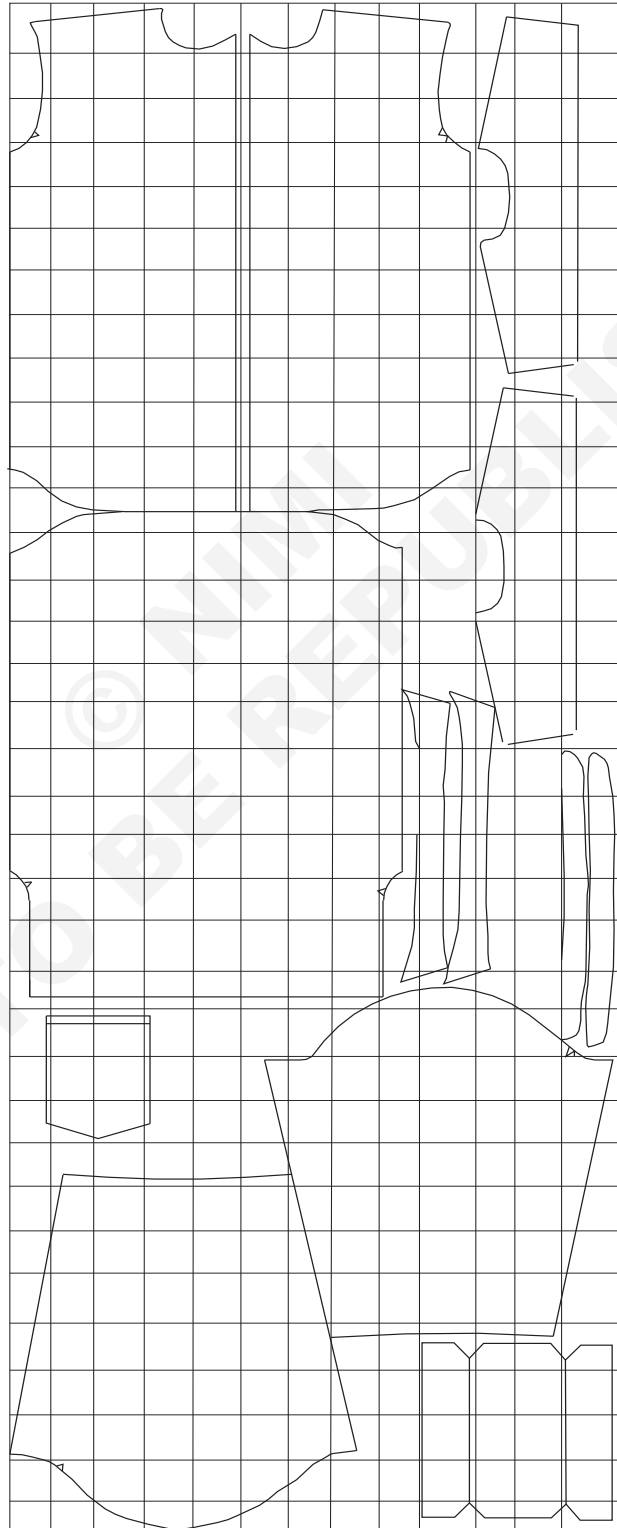


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TASK 3: Make marker for a shirt using plaid fabric

- 1 Place the Plaid fabric on the cutting table.
- 2 Make the fabric ready for layout and lay the shirt patterns on the fabric economically.
- 3 Lay the two front patterns nearby so as to obtain the horizontal line matching properly on the both the fronts. If possible, follow this for sleeves also.
- 4 If possible, place the pocket pattern near the left front so as to get the line matching.
- 5 Try different layouts and choose the best one which gives the least fabric consumption. (Minimum Lay length). (Fig 1)
- 6 Mark the outlines of the patterns with the help of the marking chalk.

Fig 1

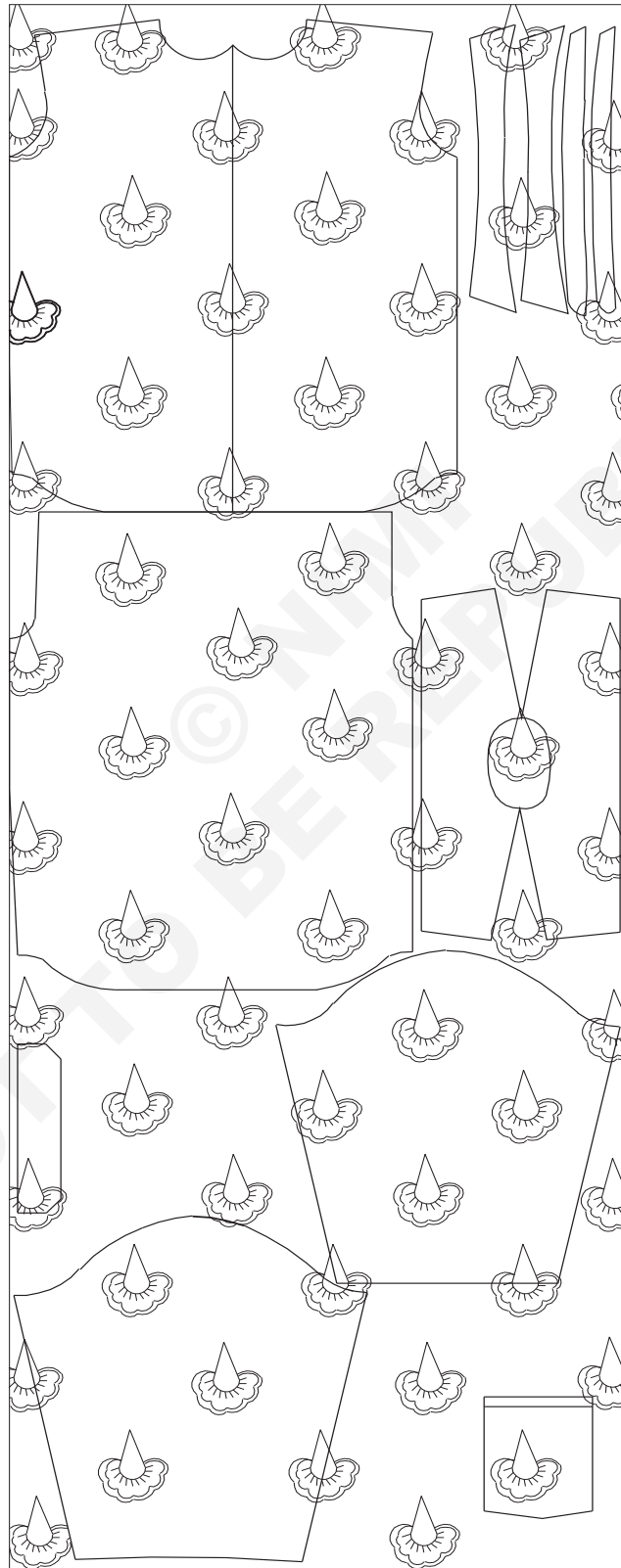


TASK 4: Make marker for a shirt using one way fabric

- 1 Place the one way fabric on the cutting table.
- 2 Make the fabric ready for layout and lay the shirt patterns on the fabric economically.
- 3 Lay all the patterns in same direction to get the one way design effect.
- 4 Try different layouts and choose the best one which gives the least fabric consumption. (Minimum Lay length). (Fig.1)
- 5 Mark the outlines of the patterns with the help of the marking chalk.

Get the work checked by your instructor.

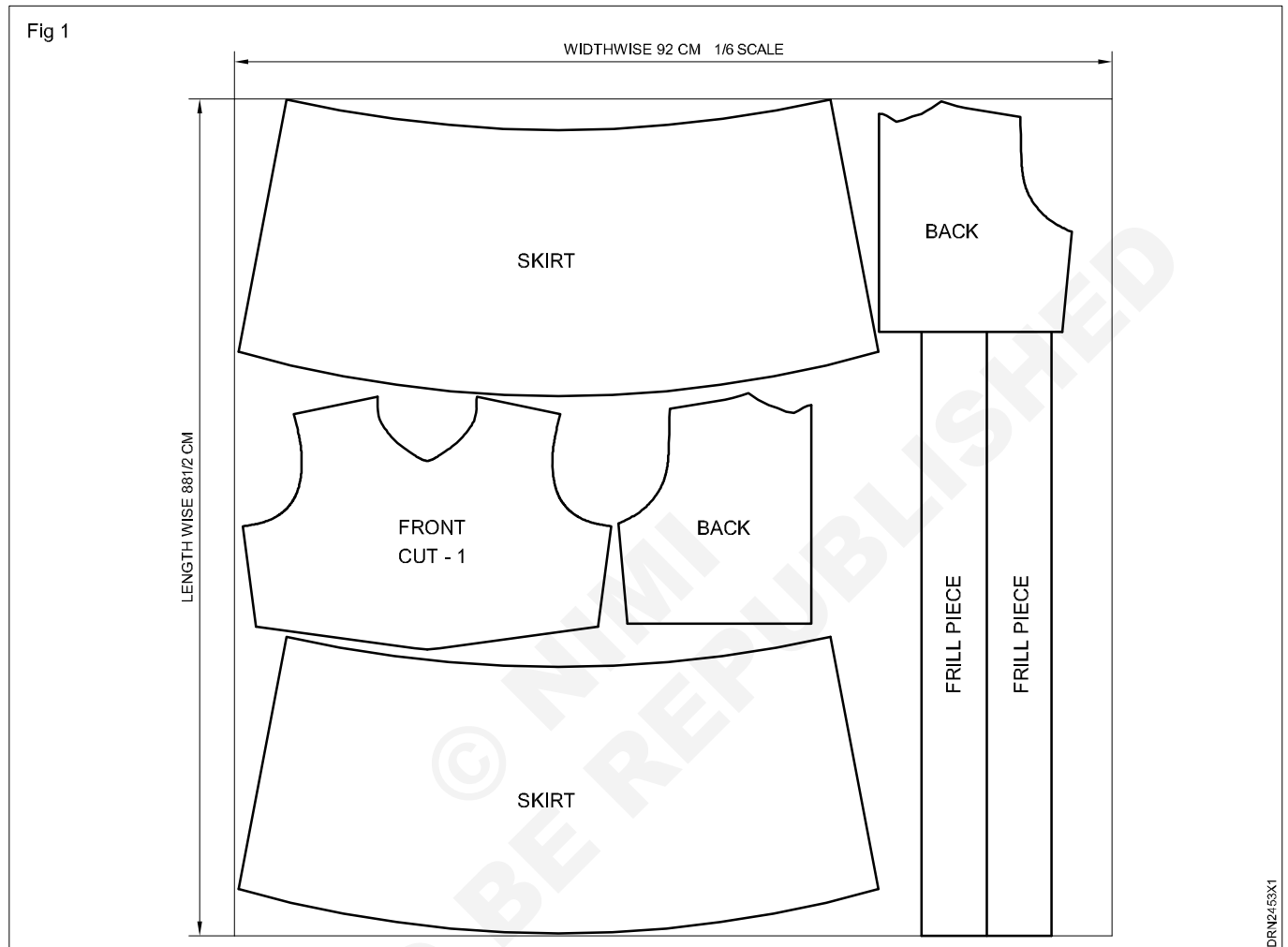
Fig 1



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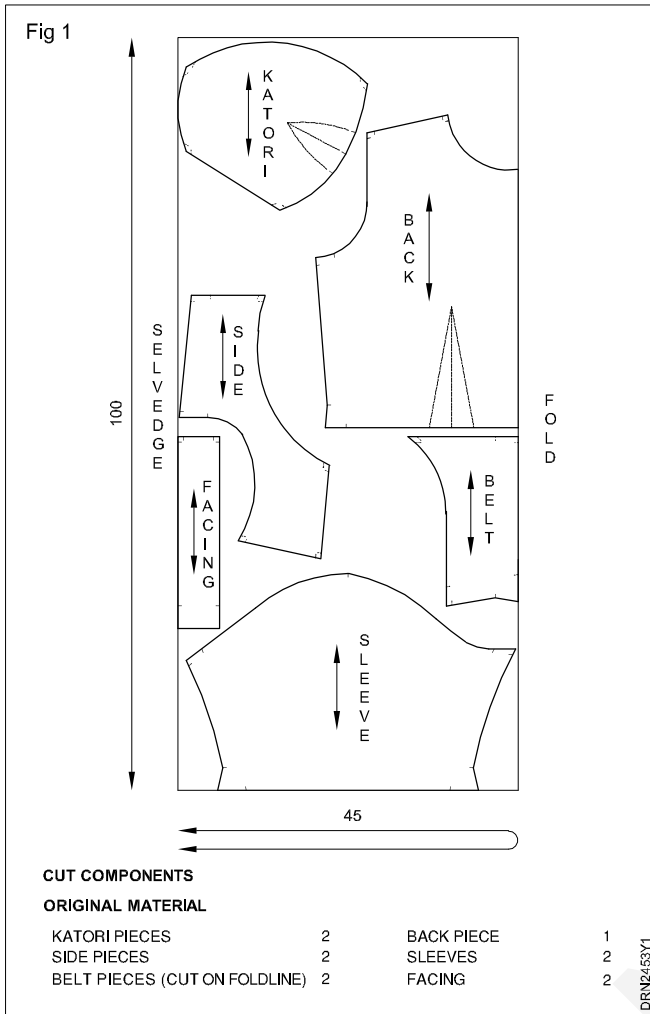
TASK 5: Make marker for a frock using plain fabric

- 1 Place the plain fabric on the cutting table.
- 2 Make the fabric ready for layout and lay the frock patterns on the fabric economically.
- 3 Try different layouts and choose the best one which gives the least fabric consumption.
- 4 Mark the out lines of the patterns with the help of the marking chalk (Fig 1)



TASK 6: Make marker for a blouse using plain fabric (Fig 1)

- 1 Place the plain fabric on the cutting table.
- 2 Make the fabric ready for layout and lay the blouse patterns on the fabric economically.
- 3 Try different layouts and choose the best one which gives the least fabric consumption.
- 4 Mark the out lines of the patterns with the help of the marking chalk.



TASK 7: Make marker for a trousers using plain fabric (Fig 1)

- 1 Place the plain fabric on the cutting table.
- 2 Make the fabric ready for layout and lay the trousers patterns on the fabric economically.
- 3 Try different layouts and choose the best one which gives the least fabric consumption.
- 4 Mark the out lines of the patterns with the help of the marking chalk.

