Instruction Sheet	Learning Guide #-1

This learning guide is developed to provide you the necessary information regarding the following **content coverage** and topics –

- Principles of pattern making
- Understanding Patternmakingterminologies
- Impact ofpatternmakinginproduction
- Purposeandadvantageof differenttypesof patterns
- Aspects of patterns

This guide will also assist you to attain the learning outcome stated in the cover page. Specifically, upon completion of this Learning Guide, **you will be able to –**

- Identify Principles of pattern making
- Understand Patternmaking terminologies
- Understand Impact of pattern making in production
- Identify The purpose and advantage of different types of patterns
- Identify Different aspects of patterns

Learning Instructions:

1. Read the specific objectives of this Learning Guide.
2. Follow the instructions described in number 3 to 7.
3. Read the information written in the “Information Sheet 1”, “Information Sheet 2”, “Information Sheet 3”, “Information Sheet 4” and “Information

Sheet 5”. Try to understand what are being discussed. Ask your teacher for assistance if you have hard time understanding them.

4. Accomplish the “Self-Check 1” in pages and “Self-Check 2” in pages
5. Ask your teacher to evaluate your work.

6. If you earned a satisfactory evaluation proceed to “Operation Sheet 1” in pages and “Operation Sheet 2” in page. If your rating is unsatisfactory, see your teacher for further instructions or go back to Learning Instruction #3.
7. Do the “LAP Test” (if you are ready). Request your teacher to evaluate your performance and outputs. Your teacher will give you feedback and the evaluati will be either satisfactory or unsatisfactory. If unsatisfactory, your teacher shall advice you on additional work. But if satisfactory you can proceed to next Learning Guide.

Information Sheet-1	Principles of pattern making

INTRODUCTION

What is Pattern?

A **pattern** is a blueprint for constructing a garment. It is an outline, a template to create shape. A pattern creates all of the components of a garment needed to form a complete unit of clothing. A patter, regardless of size or shape, includes important markings necessary to sew the pattern pieces together so that they fit precisely. These marking include: darts, seam allowances notches and punch holes for trims, pocket, button, and buttonhole placement.

In simple words **"It is a diagrammatic representation of the garment used for reproducing garment to fit a specific figure."**

What is Pattern Making?

Patternmaking, or flat patternmaking, is the link between design and production that turns a designers sketch into a three dimensional functional garment. The pattern is the means of interpreting the design regardless of the style, size, shape, or number of pattern pieces. It is called the flat patternmaking because it is a two dimensional process. When the pieces are sewn together, draped on the form, and adjusted for fit, the pattern is then translated to a three dimensional form.

Patternmaking is a highly developed technical skill, requiring precision in the drafting and development process. It also necessitates an understanding of body proportions and their measurements.

In a layman language we can define the pattern making as "To convert the two dimensional fabric into three dimensional body or garment we used to provide of introduce fullness into the fabric by changing the direction of the fabric and dimension of the fabric at some specific area in order to get the proper fit to the body."

Pattern makingis the process of changing body measurements in to a paper pattern in such a way it shall fit the 3D shape of a human body in its final assembly. In pattern making process the following points have to be carefully considered: Quality of Paper used for making patterns, Completeness of Patterns & Pattern Information, Proper arrangement of pattern pieces with respect to grain line and Best possible fabric utilization

How is Pattern Used?

After the approved pattern is completed, it is placed on fabric from which the first sample garments are cut and sewn. The sample garments are tried on dress forms and live models and then corrected for fit balance, style, and shape. Next, corrections are made to the paper pattern. The process of adjustment, fit, and correction is repeated as necessary to develop the perfect patter.

Flat Pattern making

Patterns for most garments are developed by working with basic slopes in a two-dimensional manner called flat patternmaking. When the principles of this method are understood, the results include increased accuracy and faster development of new styles.

A complete pattern has to consisted the information like:Grain Line, Part Name, Style Number, Pattern Size, Number of Pieces, Cut Symbol, Notches, Punches/Drill Holes, Seam Allowance

Important pattern symbols

- ☐ Symbol key
  - CF= Center front
  - CB = Center back
  - BP = Bust point
  - SS = Side seam
  - SW = Side waist
  - SH = Shoulder
  - HBL = Horizontal Balance Line

Complete pattern information may include

- Style/ Item
- The name of each pattern piece
- The number of pieces to be cut
- Style no.
- Size
- On fold
- Grain line
- Notch
- Drill mark/punch hole
- CB or CF
- Seam allowance
- Construction lines

Symbols used for drafting/ pattern making

- **Dart:** Dart is represented with the symbol of triangle with a straight line at the centre of the angle, .and all the three line start from the same point.
- **Dart equivalent:** A creative dart that functions as a dart in the sense that the fit is not adversely affected.
- **Dart manipulation:** Changing the location of a dart within the pattern frame. Remember that the dart is responsible for fit and will be part of the design in one form or another.
- **Design analysis:** Through design analysis, an experienced patternmaker is able to identify which principles and techniques to apply in developing correct pattern shapes that end in a three-dimensional replica of the design.
- **Design pattern**: The finished pattern that contains all the features related to the design.
- **Flat patternmaking:** Major patternmaking principles and techniques: dart manipulation (relocating darts), added fullness (adding more fabric in the design), and contouring (fitting to the hollows of a model's figure).
- **Pattern manipulation**: The act of slashing and spreading or pivoting a pattern to alter its original shape. The new pattern shape represents design features of the garment.

- **Pattern plot:** The act of placing lines on a traced copy of the working pattern relating directly to the design features. The lines are used as guidelines for pattern manipulation.
- **Pivotal point**: A designated point on the pattern (for example, the bust point). The pattern is slashed to, or pivoted from, this point. This allows the pattern shape to be altered without changing its size or fit.
- **Test fit:** A process where fitting problems are located and corrected.
- **Working pattern:** Any pattern used as a base for manipulation when generating design patterns.

- **Grain Line**: Grain line is always parallel to the warp of vertical yarns. This is shown on the pattern with a straight line with arrow on both side of the line.

  It is denoted as: Warp, Weft and Bias grain lines.

- **Style No**. :Style no. is always present on the pattern this mark shows the style no. which you have taken for particular design.

- **Notches:** Notches are given in the pattern to show the indication of seam allowance and balance marks. it indicate dart legs, joining parts used in final assembly, folding part, identifying parts etc.

- **On-Fold** : On-fold mark is given on the pattern to indicate that fabric will fold here while cutting

- **Drill mark**: it helps to indicate dart point, pocket placement and so on

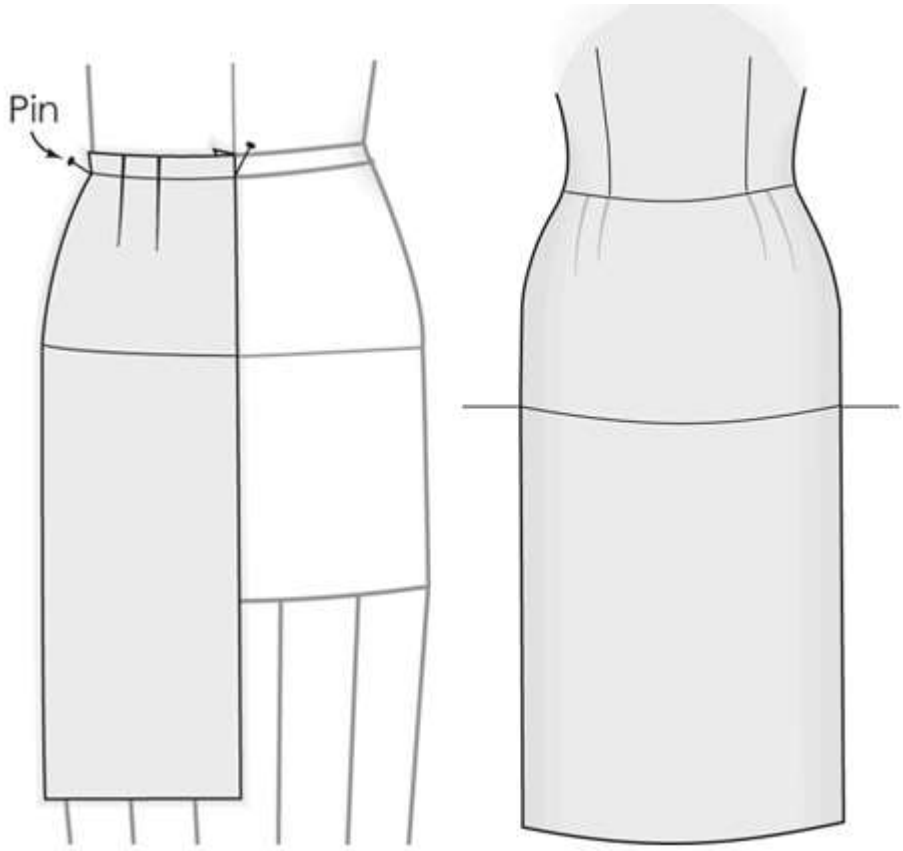
- **Cutting instruction**: the no. of pieces cut out of the given pattern piece. E.g. cut 1, cut 2, cut 4

- **Size**: it shows the appropriate size of the pattern piece. E.g. small, medium, large etc.

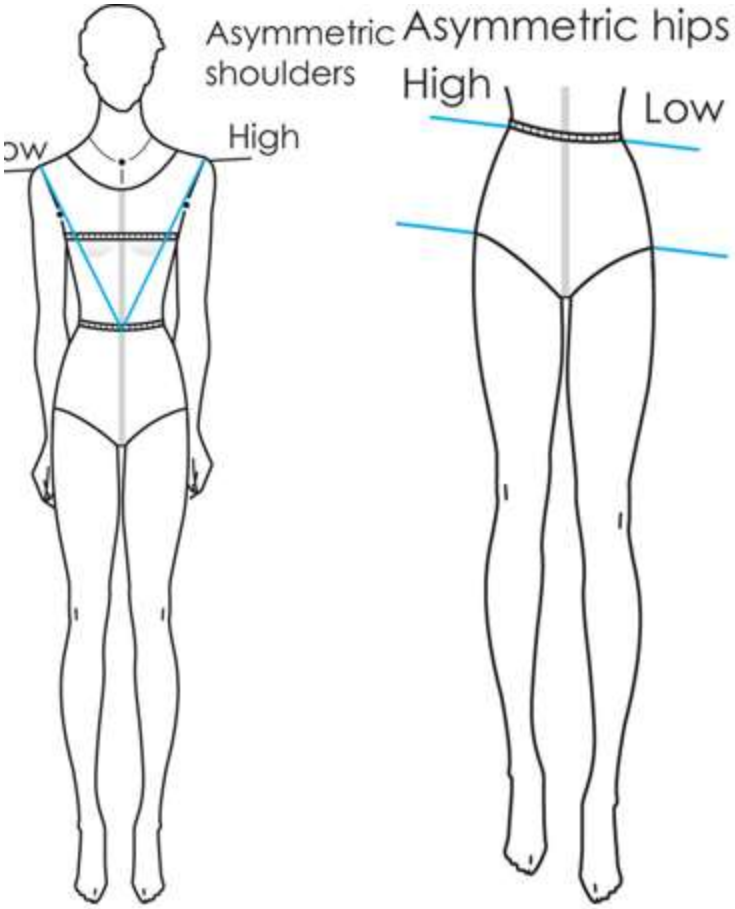
Introduces, the reader to the basic dress and to the pattern shapes that make a perfect replicate of the dress. The basic dress, its patterns, and the other foundation patterns

that are based on it are related to all designs. The student learns why darts are important to the fit of the garment, and why darts remain a part of the garment regardless of the design. The student also learns to recognize a perfect fit through trial and error in testing the muslin. Corrections are suggested to fix the most common problems found in the first test fit of the basic dress, especially fitting bust cups that are more or less than a size B cup. Problems with the fit of the sleeve are identified and corrections are suggested. Seamed and seamless basic patterns are illustrated for their special uses in the flat patternmaking system.

Alignment: How a garment relates to the center line of the form or model.



Asymmetric model: Model with shoulders, waist, or hips that are at an unequal level.



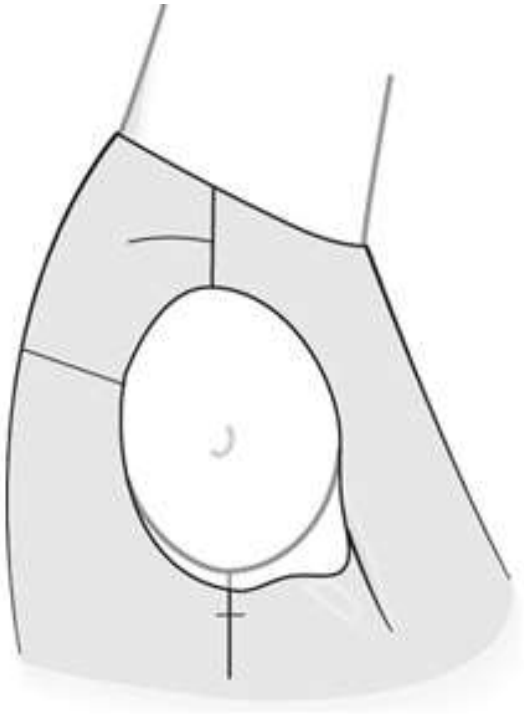
Back arc: Center back to plate at the side seam.

Basic dress foundation: The dress has all key dimensions of the form and is represented by the basic pattern set. The basic dress is the very foundation upon which patternmaking, fit, and design are based. The basic dress is made up of five distinct parts: a front and back bodice, a front and back skirt that hang straight from the hip, and slim full-length sleeves. The dress follows the model's outermost parts without contouring the hollow areas. The dress has a series of seams that are directed toward the figure's bulges—the bust, abdomen, buttocks, shoulder blades, and elbows. These seams are the wedge shapes in the draft of the basic pattern set that, when stitched, support the fit of the garment and bridge the hollow areas. The perfect garment will fit comfortably with sufficient ease and in perfect balance and harmony with the balance of the model's stance.

Bust arc: Center front across bust point to the side seam.

Bust span: Distance from bust point to bust point.

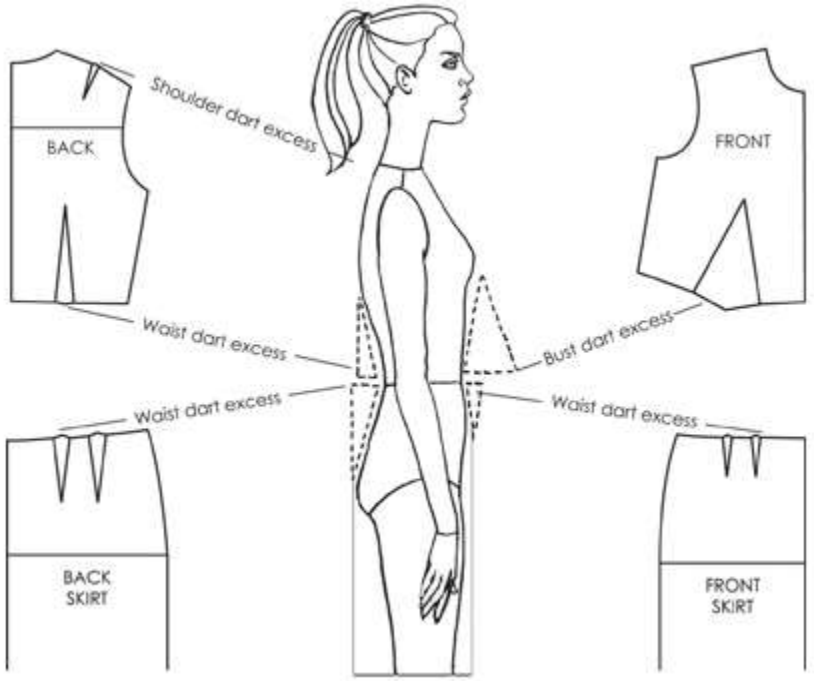
Gap: Unwanted excess in a particular location on a garment.



Hip depth: A location of the widest area around the hip.

Matching seams: Joining seams for accuracy, also called "walking" or trueing seams

Pattern shape: Patterns confine the dimensions of the figure by a series of straight lines (shoulder, side seams, skirt—below hip) and curved lines (necklines, armholes, skirt—above hip). Wedges that appear at the pattern's edge are directed to the apex of the bust, shoulder blade, abdomen, and buttocks (figure's contour). Wedges are called darts.



Shoulder slope: A measure point from shoulder tip to waist at center line.

Strap measurement: Shoulder/neck to side seam at the bottom of the waist.

Waist arc: Center lines to side seam.

1.1 Principles Of Pattern Making

The pattern making for garments is an important process in which the patterns made in two dimensions are made to fit in to a three dimensional form namely human body. Also it is a process of converting the sketches or graphic designs in to products. According to the garment size and shape the patterns are initially made in papers and then it is transferred to cardboard so as to enable cutting on leather. Prior to pattern making the style has to be observed carefully and all the details should be noted down and this will help to know where to start.

Pattern making is the process of creating all the correctly sized pieces needed to make complete leather garments. For many smaller manufacturers, pattern making is still done on paper because the cost of computerized systems remains prohibitive. The patternmaker may use one of the following techniques to develop a sample pattern. He/she may create a new pattern by using geometric rules to modify or alter existing pattern pieces. From this initial pattern, a sample garment is developed. The sample

process allows a designer to correct any problems inherent in translating a two-dimensional sketch into a three-dimensional leather garment; it ensures that the designer's specifications are accurate; and it provides an opportunity to spot potential production problems inherent in a design.

Although many firms still make patterns by hand, larger manufacturers make patterns on a computer using CAD software. Other systems have been developed that allow patternmakers to create patterns manually or by computer. As the patternmaker indicates points with the pattern pieces in the digitizer then the patterns are automatically entered into the CAD system where they can immediately access for grading and marking. Although pattern making is becoming increasingly computerized, patternmakers still must learn the manual method because making patterns manually develops an advanced understanding of leather garment construction, knowledge that cannot yet be replaced by a computer. The pattern making provides a direct basis for material-cutting and production process. Every line in the cardboard is very important which contains the designers' technique and aesthetic taste. The two dimensional patterns are made to fit the 3D form by way of introducing darts or fullness in the patterns.

It is important to understand the different pattern making principles not only to make a flat pattern but also for making alterations according to various designs. Principles make the task of developing new designs easier without affecting the size and fit of the original pattern. There are three basic principles that are to be mastered by the pattern maker or fashion designer which helps to create and modify any pattern.

The three basic principles are

1. Dart manipulation
2. Added fullness
3. Principle of Contouring

1.1.1 **Dart manipulation:**

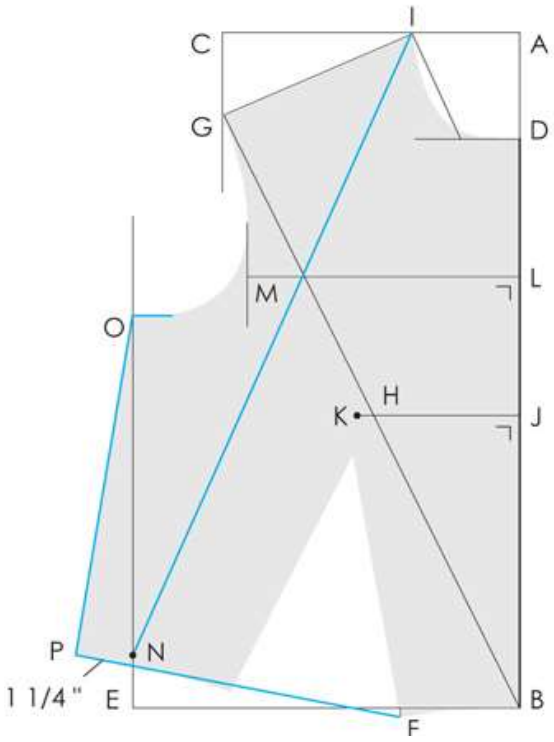
Dart is a triangular fold of fabric stitched on the wrong side of the garment which responsible for fit of the garment. Dart manipulation is changing the location of a dart within the pattern frame. There are many rules for creating, combining and dividing the darts and transferring dart at different places on a pattern piece. In doing so it is

possible to shift the dart, divide the dart and relocate the dart into other parts of the bodice without changing the fit of the garment but helps in creating interesting dress designs.

Design analysis and the identity of the principle(s) are an essential part in preparing the plan before beginning a patternmaking project. The purposes of the dart as a fitting device and its flexibility for creative use are discussed. The technique of using the slash-spread method or the pivotal-transfer method illustrates how the transfer of darts creates design variations. The single dart is divided to establish two other basic patterns as the foundation for other designs. Thought problems are also presented.

Darts are folds sewn into fabric/leather to help provide a three-dimensional shape to a garment. They are frequently used in women's clothing to tailor the garment to the wearer's shape. In leather garments the darts are generally located in two places namely 1) Bust dart and 2) Waist dart. The darts, which are placed originally at bust or waist, needs to be shifted to seams/joints in leather garments. This is because of the material thickness in case of leather garments compared to textile garments wherein the thickness of the material is comparatively less. The process of moving the dart from one place to other is called dart manipulation.

The flat patternmaking method is defined, and why it is preferred by industry is explained. A poem tells the plight of the working pattern and asks students to draw the design based on the pattern shape. Students are guided to two designs to be drafted either now or later in their development.



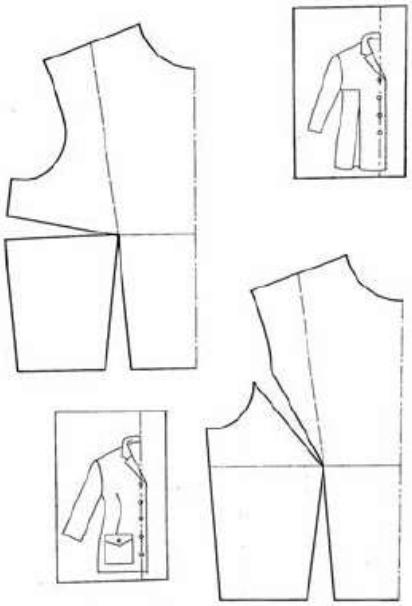
Dart Manipulation consists of

- Shifting a dart
- Making a dart disappear into a seam
- Including dart value in pleats or in gathers

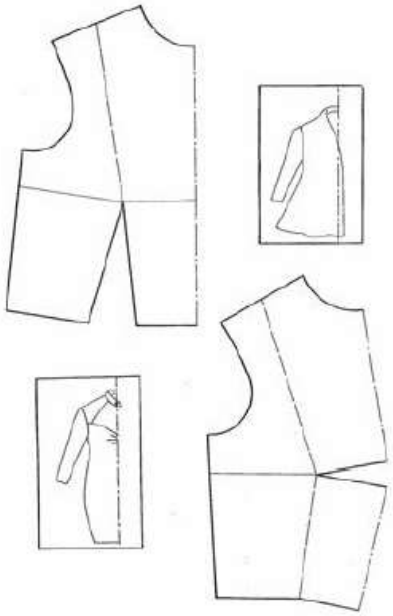
When a dart is manipulated, it does not mean that the dart value is eliminated.

The dart is an essential element for a garment, respecting the shape of the body. Dart manipulation may be executed by providing or by cutting out. The following methods are used f or dart manipulation.

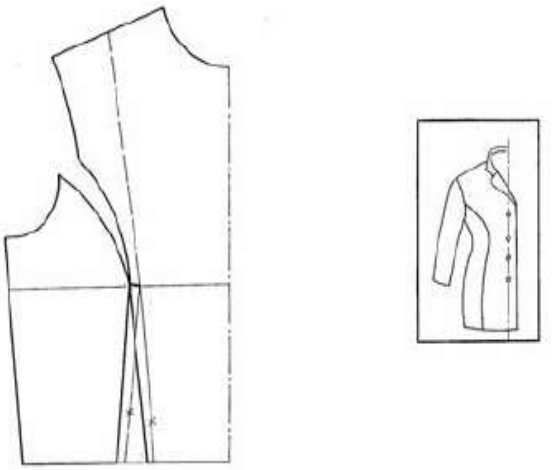
Shifting the bust dart under the arm



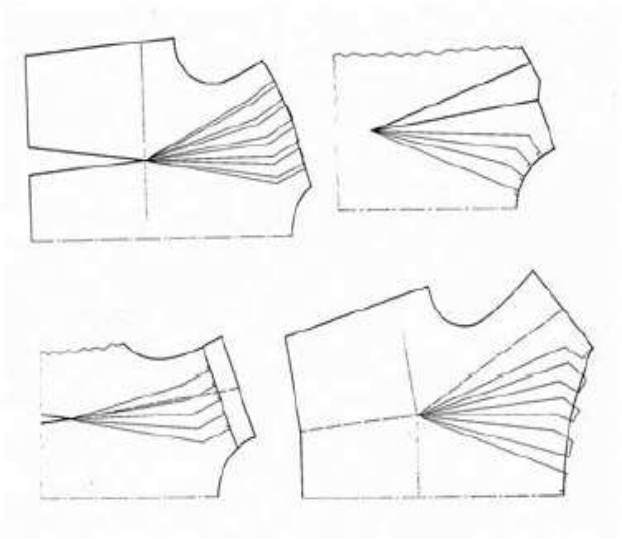
Shifting a dart into another dart



Shifting a dart into a seam



Converting darts into gathers



1.1.2 Adding fullness

Principle of added Fullness: There are rules for adding fullness in a garment. Fullness can be provided in a garment with the help of gathers, pleats, tucks etc. So this principle provides greater amount of fullness than the dart excess gives in a pattern. Due to this added fullness the pattern's length and /or width is increased.

Adding fullness: Applies when design fullness is greater than the dart excess can provide. Added fullness is not directed to the pivotal point (bust). Adding to the pattern's outline also indicates that added material is needed for the design.

Added fullness: Fullness from the basic dart is always directed to the bust. Therefore, designs can be identified as having added fullness if fullness passes through the length or width of the garment, when fullness is directed away from the bust, and when the garment extends beyond the outline of the figure.

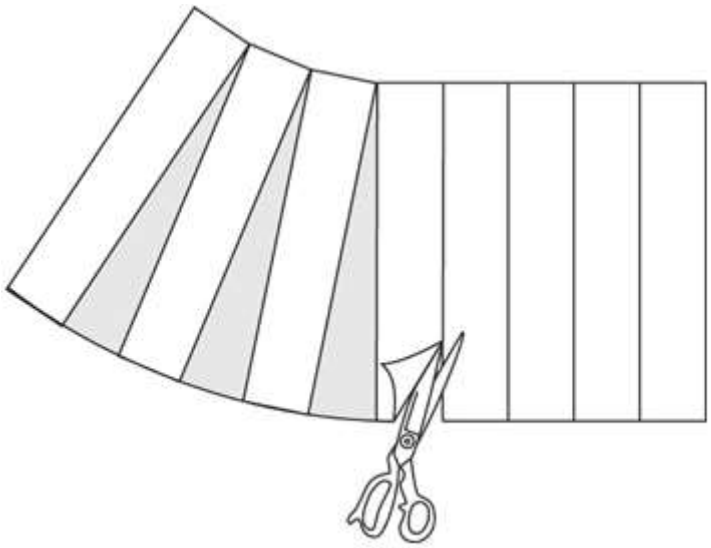
Blouson: A blouson is a billowy-topped garment with an overhang anywhere from below the bust to the ankle. The blousing is controlled (held in place) by one of the following methods:

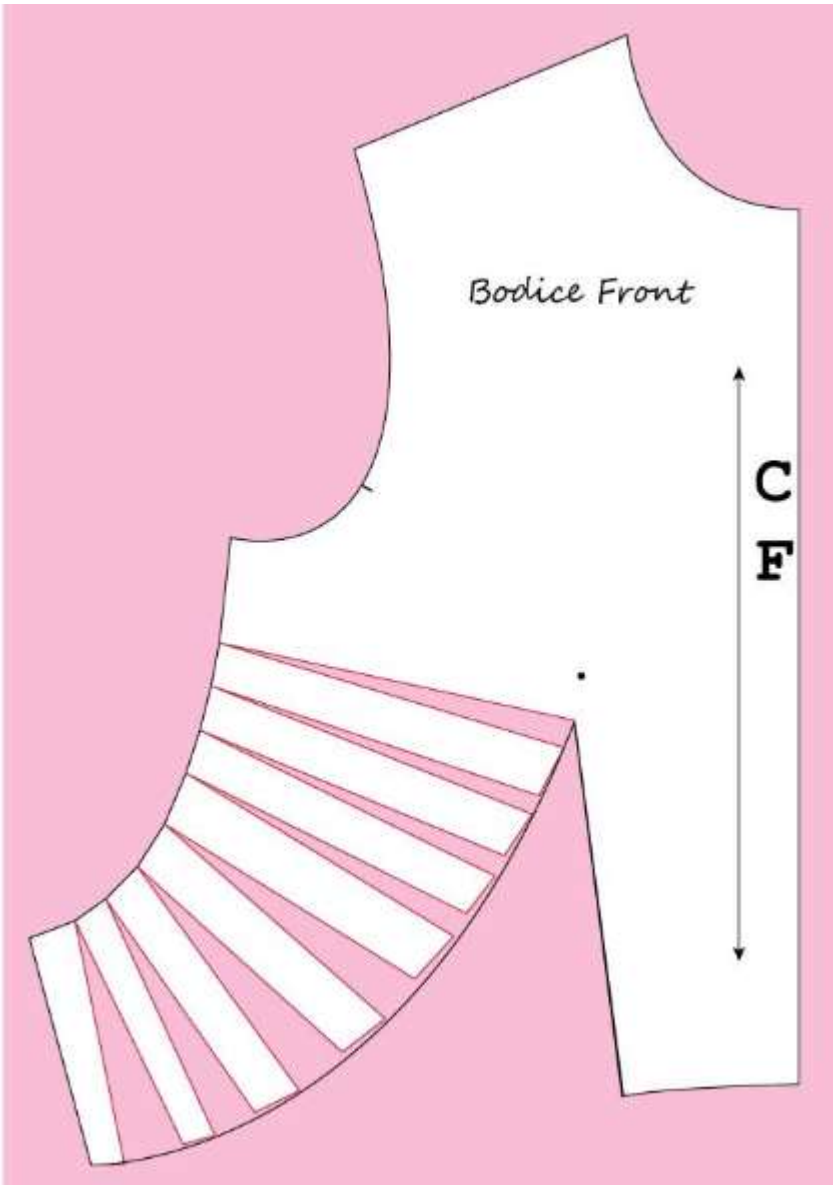
(1) a lining cut shorter than the finished length of the outer part;

(2) a belt that secures the blouson to the waist;

(3) a casing that accommodates elastic or drawstring (within the garment's frame); or

(4) a band, attached below the separate blouse, measuring less than hip measurement.





Fullness can be added to any pattern piece for one of two reasons:

- Add extra ease (e.g. An A-line skirt; fullness is added in the hem).
- For design/stylistic purposes (e.g. fullness added to the sleeve cap to produce a puff sleeve that doesn't add any wearing ease to the sleeve, it just creates a look)

Fullness in leather garments can be provided by pleats, gathers or flaring.

Pleats

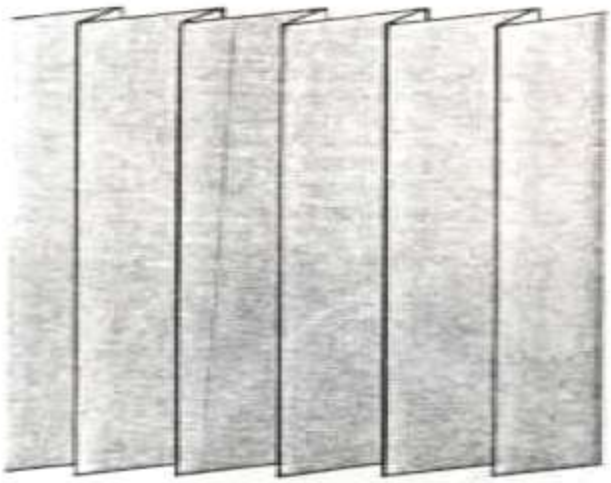
Pleats are folds of fabric that provide fullness in some parts of a garment. The following design elements are created by adding fullness:

- flare
- gathers
- pleats
- tucks

They can be placed single or in a series and can be pressed flat or left unpressed, according to the style of the garment. Pressed pleats give a smooth, slimming line to a garment, whereas, unpressed pleats provide a softer and fuller shape. Pleats are introduced usually at the waist line of skirts and dresses, to provide fullness evenly all around. The preparation of pleats is similar to that of tucks, the main difference being that pleats are seldom stitched all the way down. Sometimes they are stitched part way down the garment for flatness. Each pleat requires extra material of twice the width of the finished pleat. If pleats are to touch each other all round the garment, the amount of material needed is three times the finished width. There are different types of pleats that can be used in garment construction. Among more commonly used are.

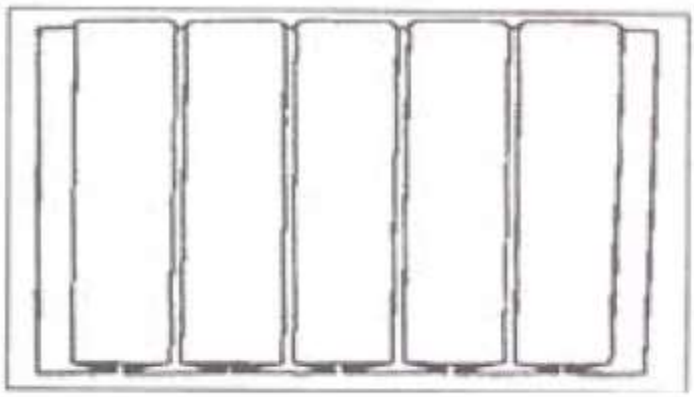
a. Knife pleats:

They are usually about 1/2 inch to 1 inch wide and are turned towards the same direction. The direction may be reversed at centre back or centre front of the garment. Make all the pleats in the same direction. Press them. Pleats can be top stitched in place from waist to hip to produce the slender effect. The main function of a knife pleat in a tailored garment is to provide fullness at the bottom of the garment.



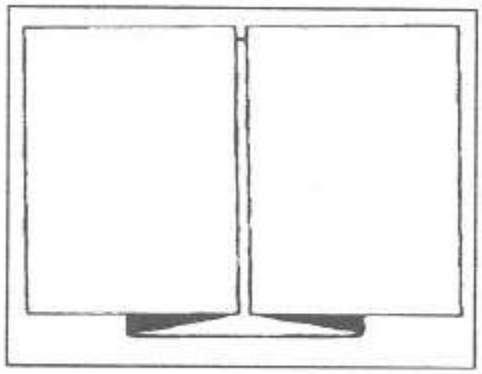
b. Box pleats:

Two knife pleats turned away from each other (one to the left and one to the right) form a box pleat



c. Inverted box pleat:

It is the opposite of a box pleat. It is made up of two knife pleats turned towards each other so that the folds meet in the middle on the right side of the garment. It looks like two knife pleats facing away from each other on the underside



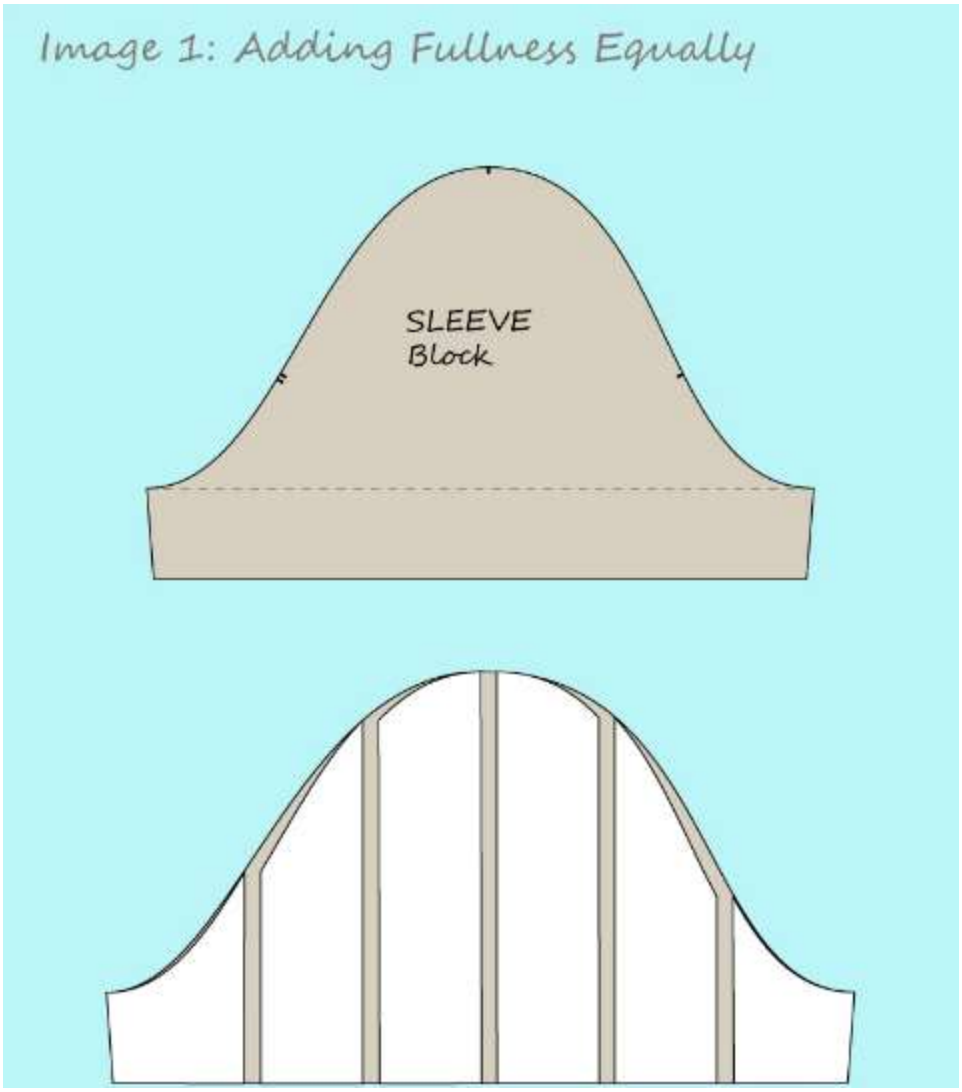
Flaring

Flaring is to spread outwards from a narrow to a wider shape. Flaring is usually done with skirt patterns. Making a flared skirt does not have to be difficult. When cutting out the bottom half of the skirt you want to be sure that the material gets wider as you go down. When sewing it together, this will give a flared look.

Spreading fullness

There are three different ways (Equally, One-Sided and Unequal) in which this principle can be achieved in clothing.

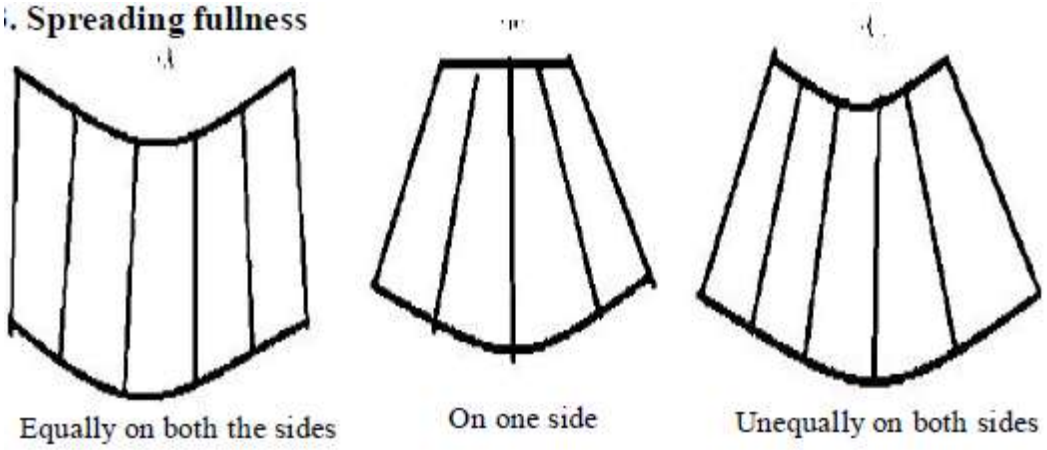
1. **Equally throughout the pattern piece:** One is by increasing fullness equally on top and bottom of a pattern, In this image, the sleeve is cut and spread so that the fullness is added throughout the sleeve equally, from top to bottom. The resulting sleeve would have added fullness in both the sleeve cap and the bicep



2. **One-Sided:** The other is giving fullness on one side only while the other side remains unspread and In this image, the sleeve is spread at the bottom only, adding fullness to the bicep, but not to the sleeve cap.

3. **Unequal:** Lastly by spreading pattern unequally on both the sides. This means that the pattern is spread more on one side and less on the other side.

The examples below use the sleeve, but fullness can be added to any garment part.

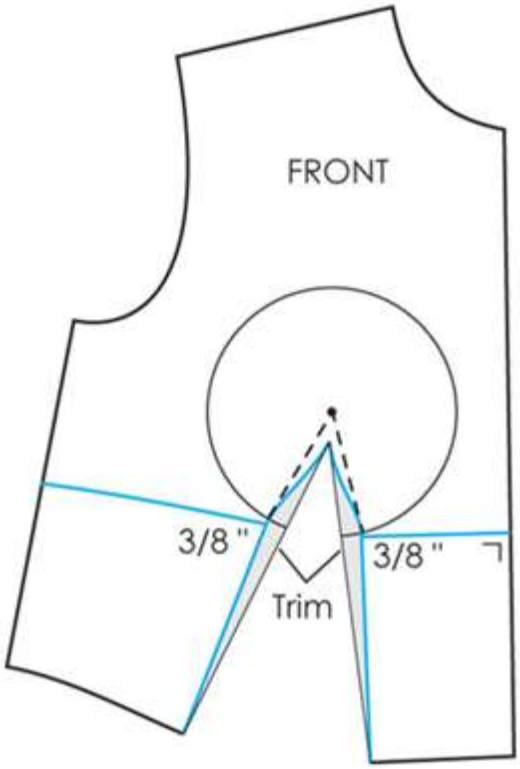


1.1.3 Contouring

Principle of contouring: This principle makes a pattern well fitted to the curved human figure than even a normal pattern with darts. Fitting is achieved in the pattern by reducing within its frame to fit the body above, below and in between the bust and shoulder blades using seams and darts for a closer fit. Strapless dresses, bra top are examples of garments made on this principle.

Contouring: fitting to the contour above, below and between the bust, leaving the dart excess to be absorbed into style lines or gathers. Gapping ease caused by cutout neck lines and armholes is transferred to be absorbed.

Contouring is the last major patternmaking principle and technique to be learned. The discussion centers primarily on a three-quarter circle around the bust radius, since this is the area where the hollows are the greatest (above, below, and between the busts). A separate pattern is marked (as a tool) to show the selected designation of the hollow areas around the bust circumference. The student is shown how to use the Contour Guide Patterns through transferring unwanted excess from the hollow area to an available dart, or dart equivalent. The modified pattern will reveal the contour of the bust in the desired areas. Examples also illustrate how to use the Contour Guide Patterns for facing of cutout necklines and armholes. The empire style lines, the surplice, and off-shoulder and halter designs are developed with the Contour Guide Patterns.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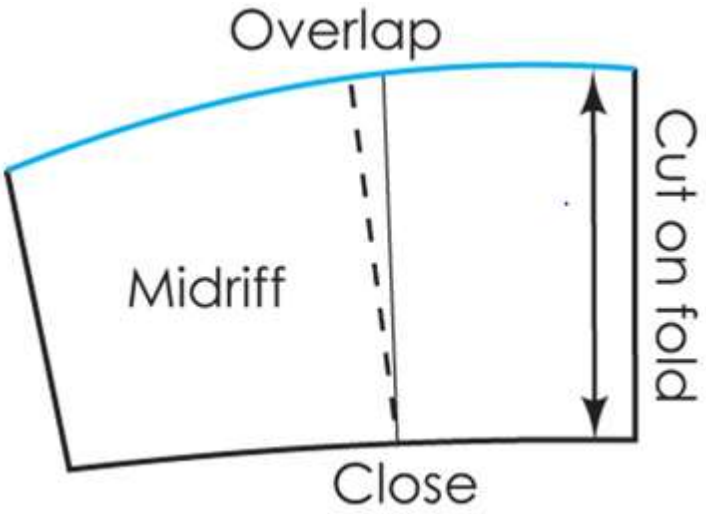
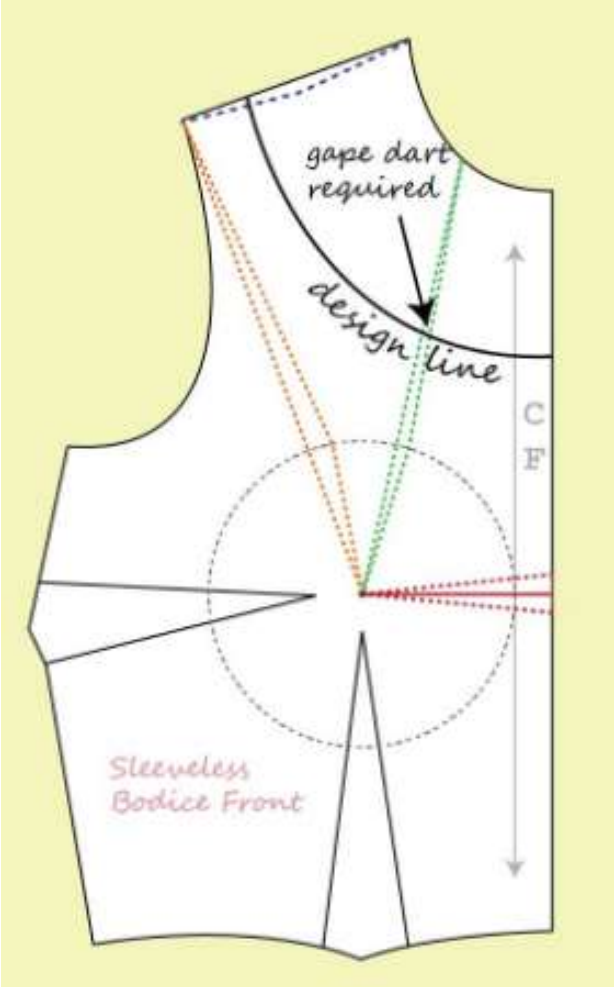
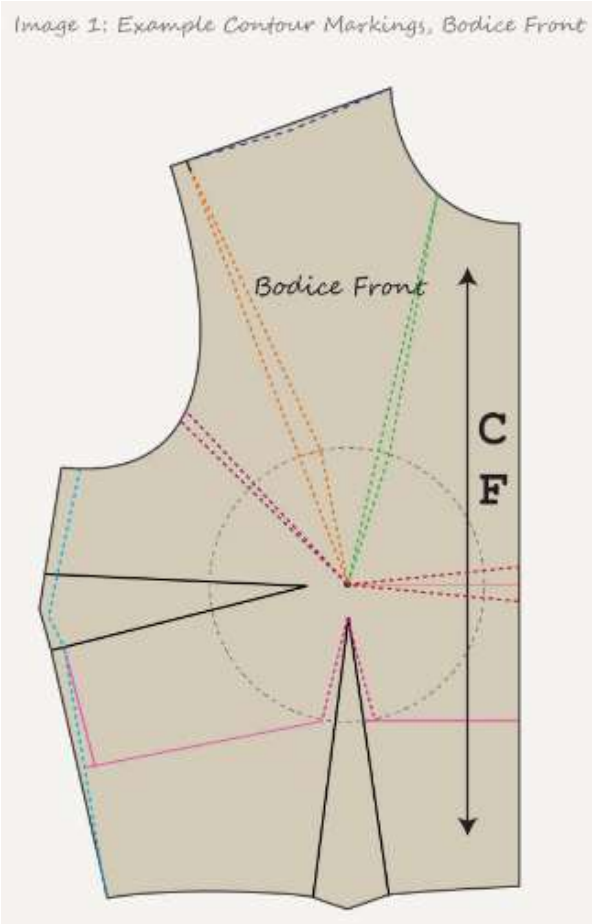
Trim


Overlap
Midriff
Cut on fold
Close





Darts on the Bodice Front

The darts on your Bodice Block Front can be moved to anywhere around the edge of that block.

Basic techniques used in flat pattern designing

Flat pattern designing is simple to make, economical and practical.

Designs can be obtained by relocating the darts and changing them into various forms.

Yoke, collar, sleeve and skirts designs can be created using basic slopers.

Many designs can be created by simply relocating the dart or by converting the dart into various forms such as gathers, pleats, tucks, princess panel etc.

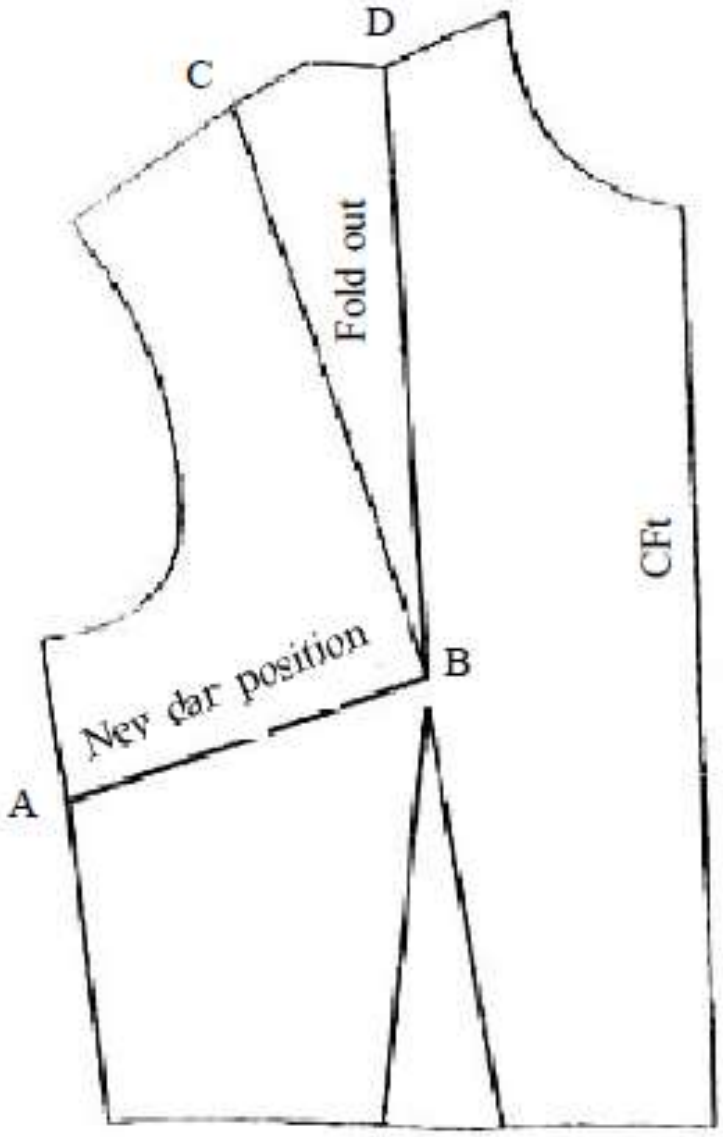
Basically through flat pattern method a basic pattern is created and this is used to create various other new designs by manipulating it in different ways specific for a particular design. Designers generally can create new designs by a combination of cut, slash and spread techniques of the basic pattern which is also termed as ‘pattern alteration.’ Through pattern alteration a pattern can be altered in length and width or making changes in position. This is true in case of darts, as they form an important aspect in pattern designing. Now let us understand the two basic methods

(a) Slash and spread method.

(b) Pivot method

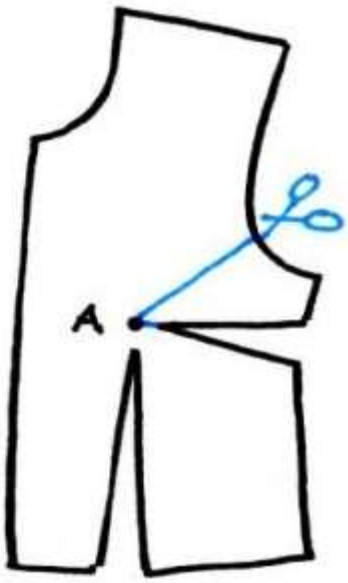
(a) Slash and Spread method

In this method, new line is drawn anywhere from the edge of the bodice pattern (AB) in such a way that it touches the bust point. The pattern is slashed at this new line until the bust point but not through it. The old dart (CD) is now closed. Now the slashed line opens out in the form of dart. This creates relocation of the dart without changing the fit of the garment. Let us see this with an example of shifting one of the side seam dart to armhole.

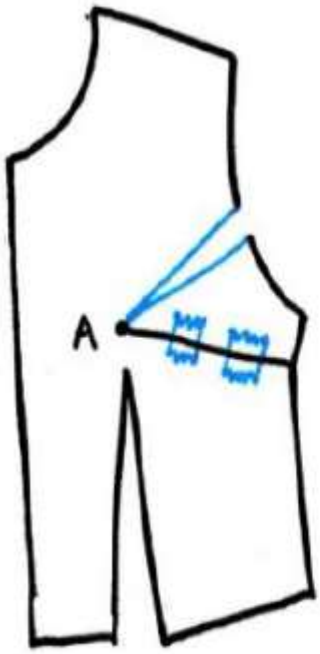


Slash and Spread method

Original pattern



Location of new dart at armhole and slashing it



Closing the old dart so that new dart is formed at armhole

Trueing the side seam line

Pivot method : This method does not require slashing of the pattern.

It is a faster method but requires little skill for the designer. Let us see how this can be achieved.

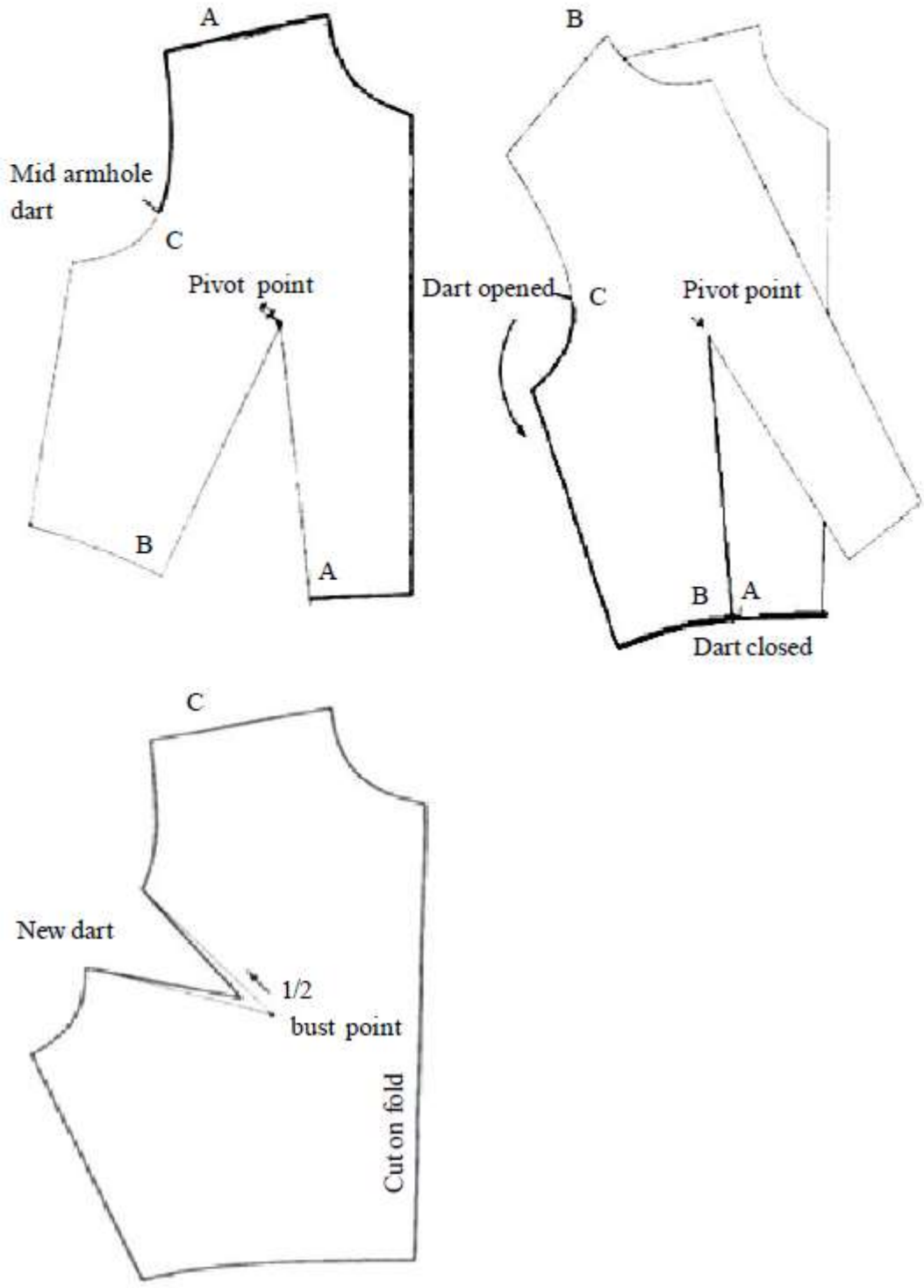


Fig Pivot method

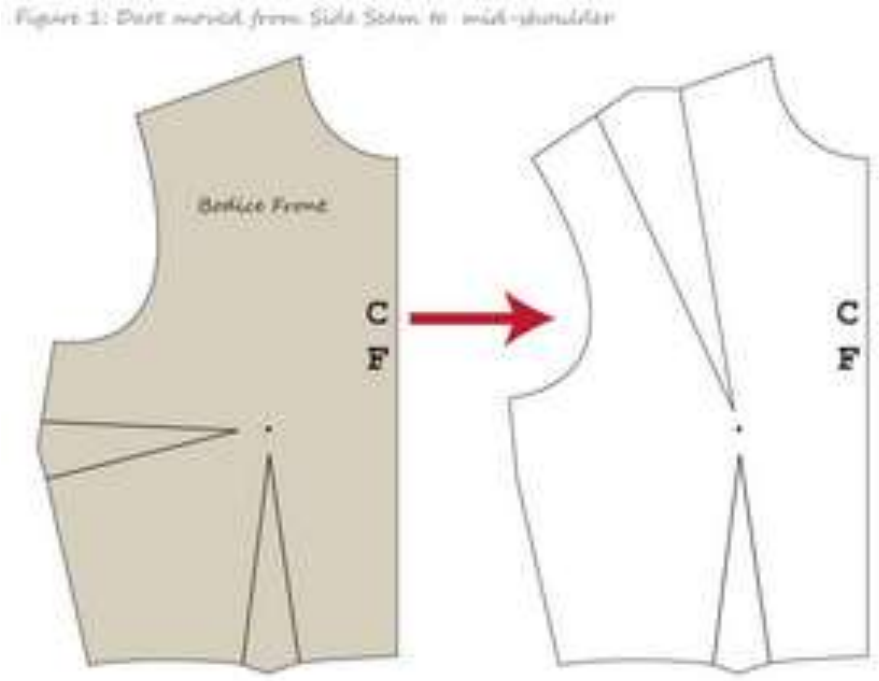
First place a working pattern on a piece of paper which is wider and longer than the pattern. Pin it down with a push pin at the bust point. Mark a point on the pattern where

the relocation of dart has to be made. In the picture given below the relocation is done to the midpoint of arm hole. Now place it on the paper and trace the pattern from dart leg (A) to the new located point on the pattern (C). After reaching point C, pivot or rotate the pattern in such a manner that the original dart legs B meets A. at this point it can be seen that the dart is closed. At the same time it can be observed that point C also moves. Now trace the pattern from the new location of C to combined dart legs AB. Remove the top pattern and it can be seen that a new dart is seen on the paper at armhole point only.

Operation sheet -1	Move dart in the bodice

Example: Moving a dart in the Bodice Block

Figure 1 show Bodice Block on the left, and a pattern on the right where the side seam dart from the block has been moved into the shoulder.



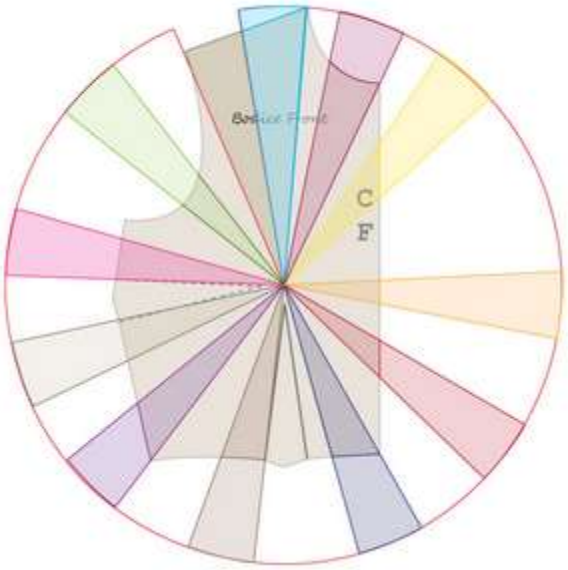
Note that in Figure 1, only the side seam dart was moved, and the waist dart stayed the same. If the design called for it, I could have moved both darts into the shoulder. I could have moved the side seam dart into the shoulder but the waist dart into the centre front. They are just some of the many options available for moving darts in the Bodice Front. There is a great deal of flexibility with the Bodice Front; you can move either or both of the darts to anywhere around the edge of the block.

Moving Darts in the Bodice: Many Options

Figure 2 below gives an example of where you could move the side seam dart around the edges of the block. In this case, I have only moved the value of the side seam dart, so the waist dart would be the same in each case. Of course the actual pivoting has not

been done; this is just to show some examples of WHERE the dart can be moved to, and it shows what the dart value would be at the edge of the block.

Figure 2: Dart can be pivoted anywhere around the block.



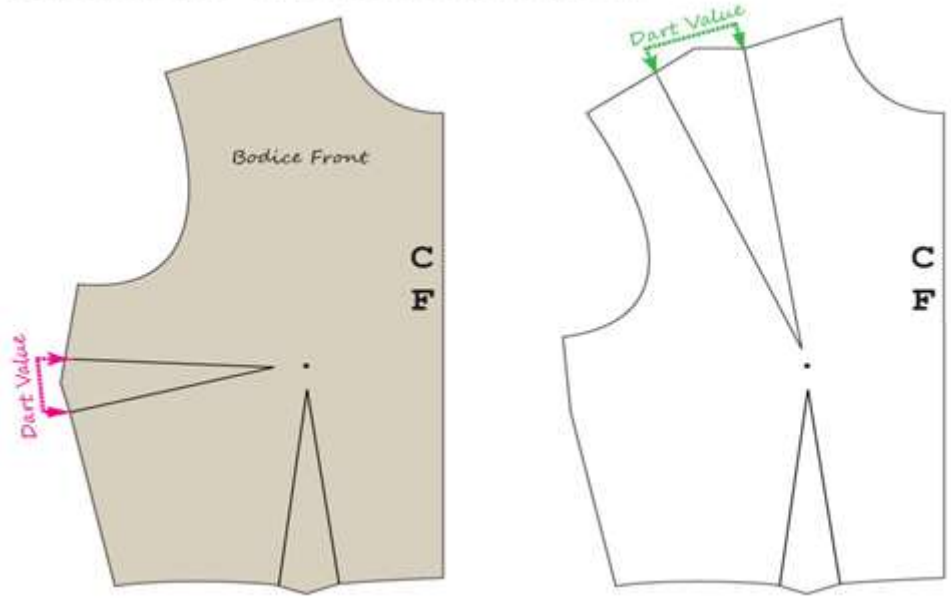
Dart Values

Before we move on to how darts can be moved in a skirt, it will pay to understand how dart values change when you move darts. Understanding this first in the Bodice Block will help in understanding why the options of moving darts in the skirt are more limited.

In Image 3 below, we have the same image as at the top of the page; the basic Bodice Block that has a waist and a side seam dart, and a pattern where the side seam dart has been moved to the shoulder seam. the Dart Values of the side seam dart and the shoulder dart are indicated. The dart value is the width of the dart; and you can see that the shoulder dart is bigger; it has a greater value that the side seam dart.

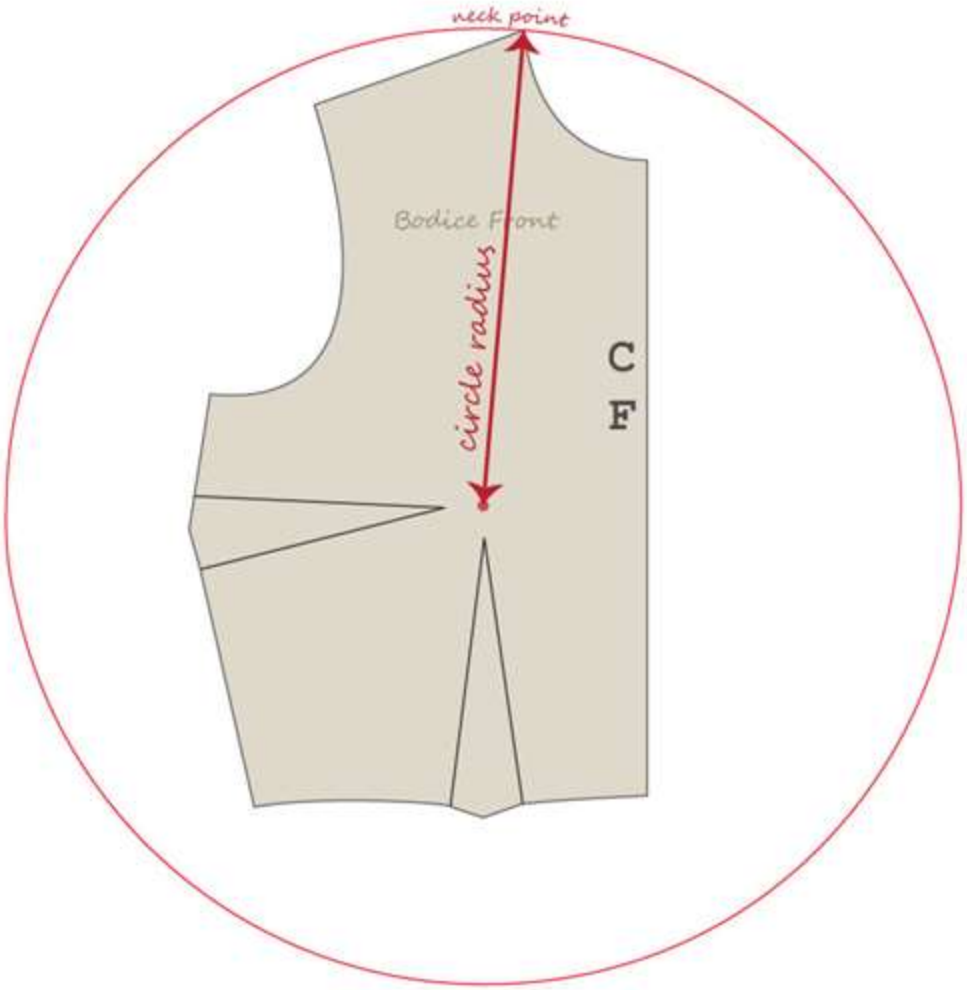
The dart value is the width of the dart; and you can see that the shoulder dart is bigger; it has a greater value that the side seam dart.

Figure 3: Dart Value - side seam dart moved to shoulder

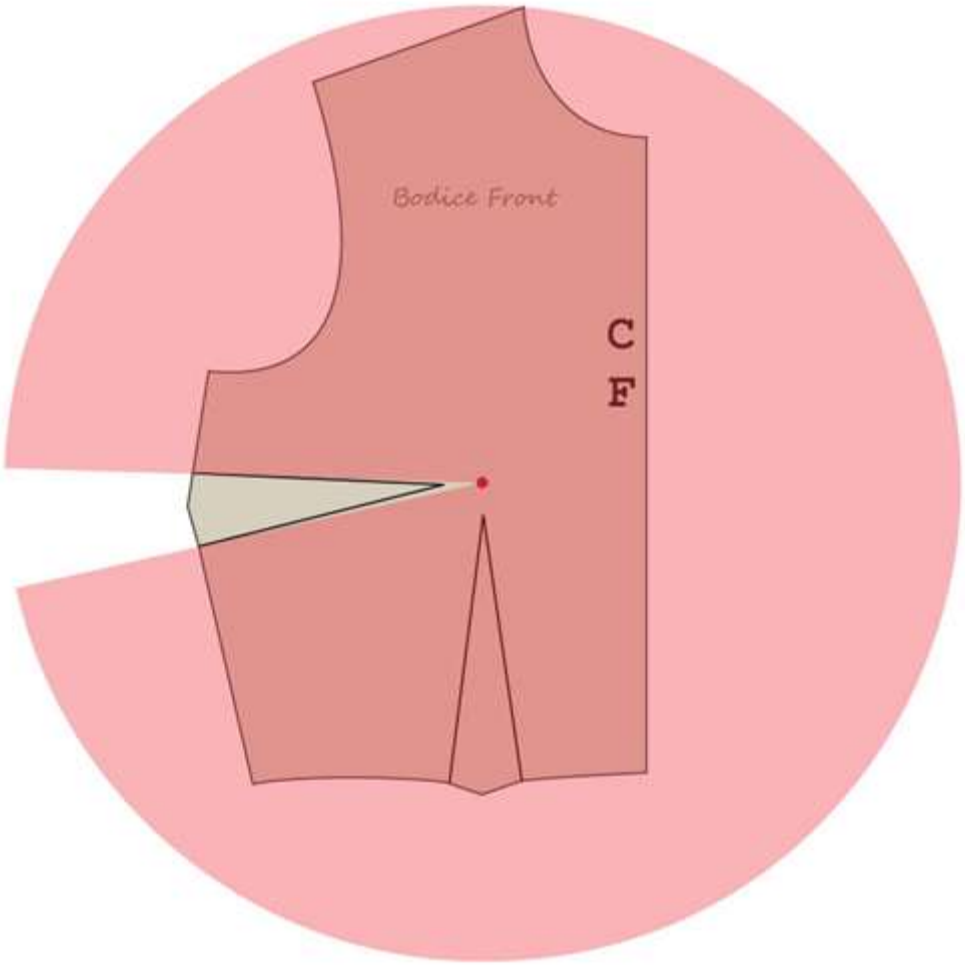


This is because the dart is moved from a central pivot point, the Bust Point, and the Bust Point is the centre of a circle. The radius of the circle is from the Bust Point to furtherest edge of the block; in this case, the Shoulder Tip. See Image 4 below:

Figure 4: Darts pivoted around the Bust Point

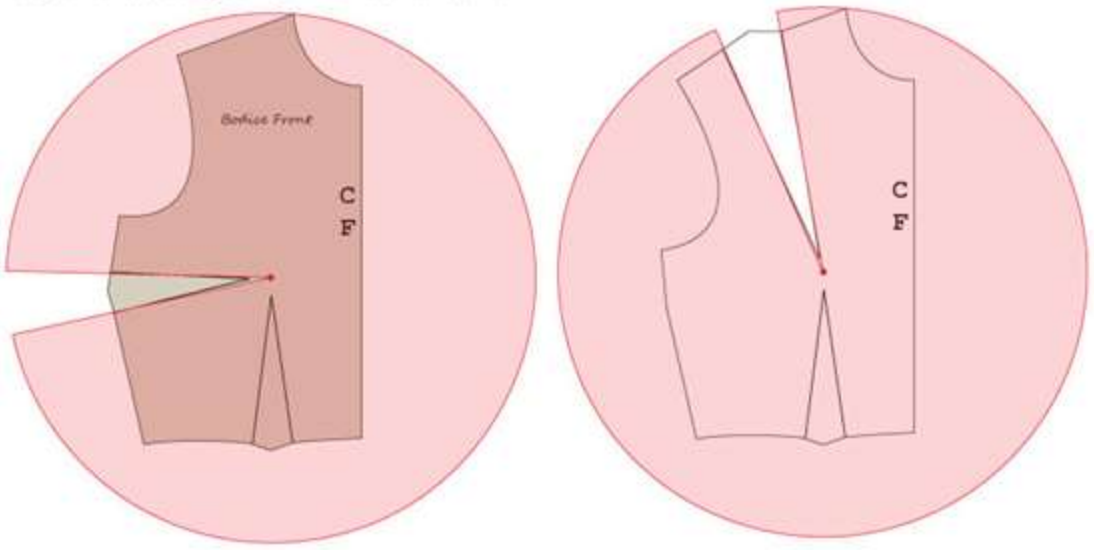


I will take this circle and cut out a wedge where the side seam dart is; see Image 5:



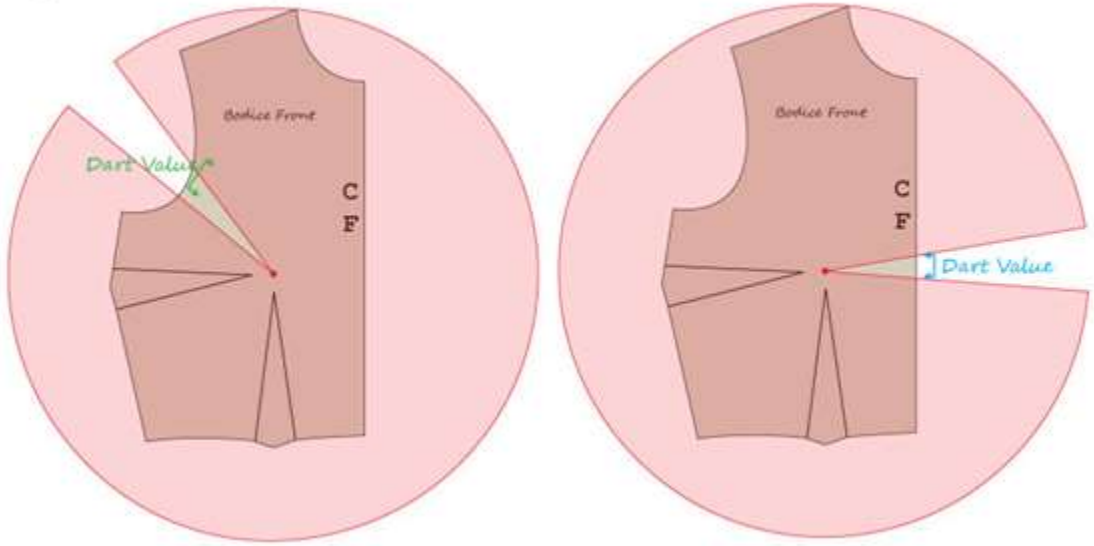
In Figure 6, I have just moved the circle, with the wedge cut out, around to the shoulder. You will see that the value of the wedge is the same, but the shoulder dart is bigger because the shoulder line is further out towards the edge of the circle.

Figure 6: Pivoting side seam dart to the shoulder



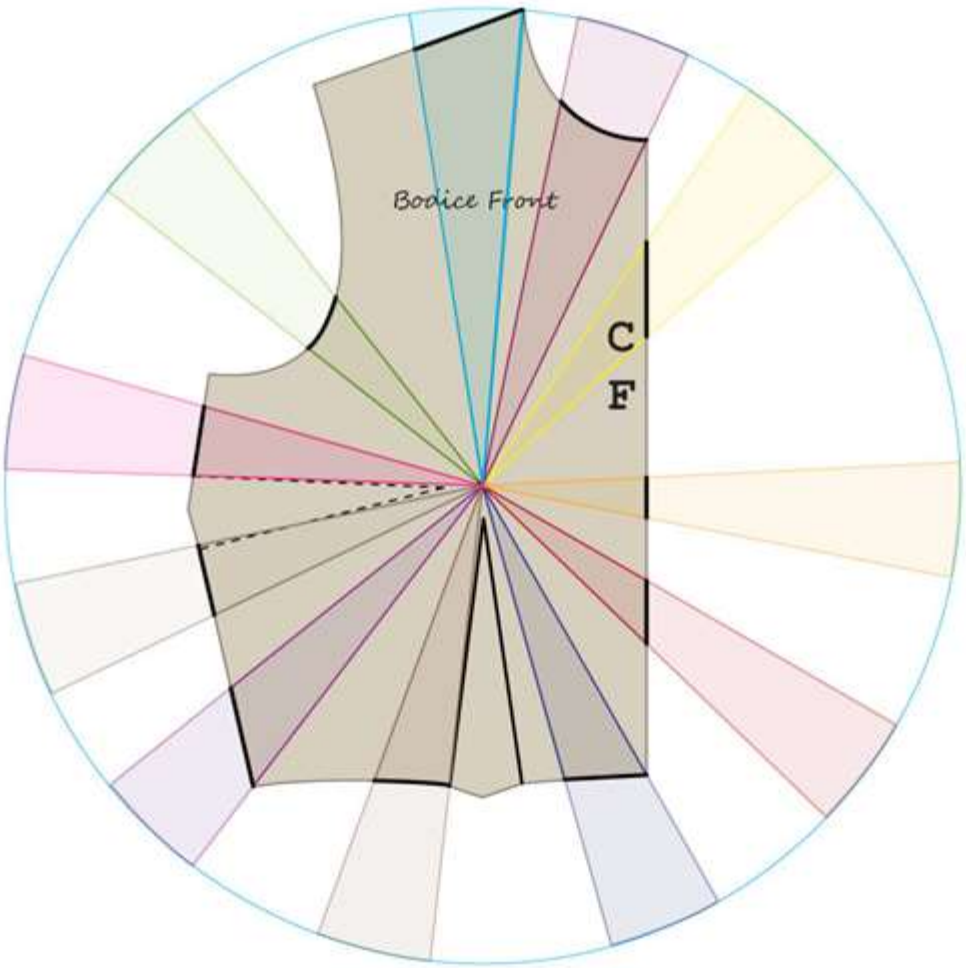
In Figure 7, I have moved the same circle (with the same wedge cut out) around to the armhole and the Centre Front in line iwth the Dart Point. You can see that the further in the circle, the smaller the dart value.

Figure 7: Understanding Dart Values



In Figure 8, that circle is moved around to various places on the block. The black lines indicate the dart value for the different placements of the dart.

Figure 8: Dart Values



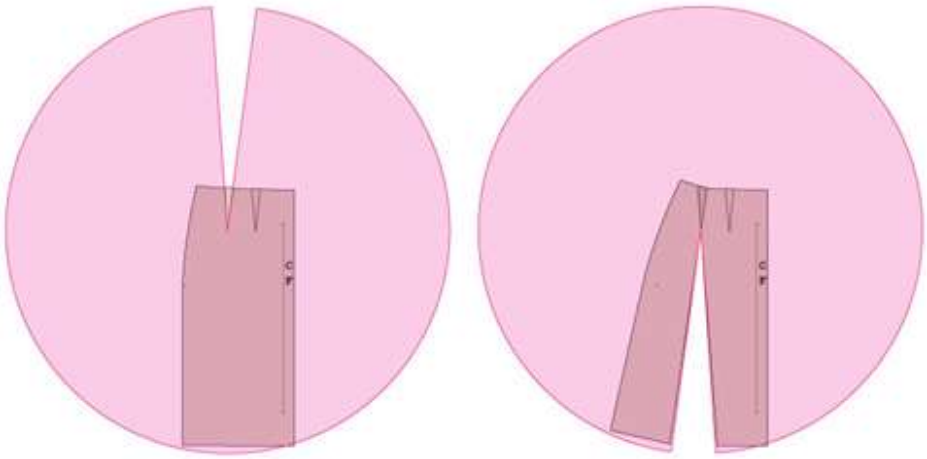
Darts in the Skirt

Now with the Bodice Front above, we closed a dart to open up a dart in another place. There are a few different reasons for doing this on the Bodice; moving a dart for the sole purpose of having the dart in a different place on the garment as that creates a different style, moving the dart in preparation for a design line (e.g. a Armhole Princess Line or a Shoulder Princess Line, etc), or moving the dart to create a style that will have a dart equivalent (tucks, gathers, pleats, etc).

This is not the same with the skirt. In Image 9, I have created the same circle with a slice cut out to show you the consequence of moving a dart in the skirt.

The pivot point for the skirt is the same as the Dart Point. You can see that if we closed one of the darts in the skirt waist, how much would open up on the skirt hem.

Figure 9: Manipulating Darts in the Skirt

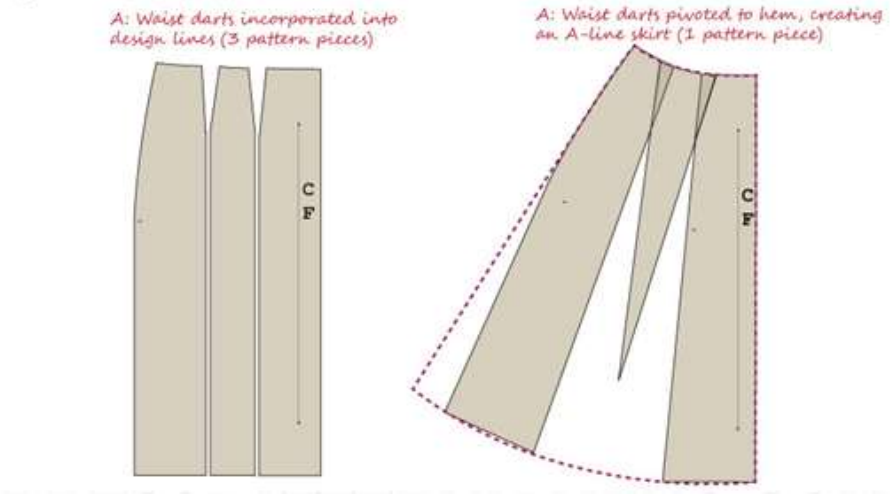


In this case, it would not make sense to move the waist dart into the hem JUST to use that wedge as a dart; this would be a waste of fabric. (Note: Of course you could choose to 'cut out' the fabric and have a seam line instead, but in that case you do not need to manipulate the dart. See Figure 10 below to understand the difference.) The reason you would close this waist dart and open up the value in the hem is to create an A-line skirt. If you closed both darts, the skirt would be contoured in the waist, without having waist darts, but of course it would have an even wider hem width.

So, to summaries: moving the dart into the hem only works if you want an A-line skirt.

** In Figure 10: Compare removing dart by creating a seam line and incorporating that dart into the seam line, and using dart manipulating to move the dart to the hemline.

Figure 10: Waist Shaping

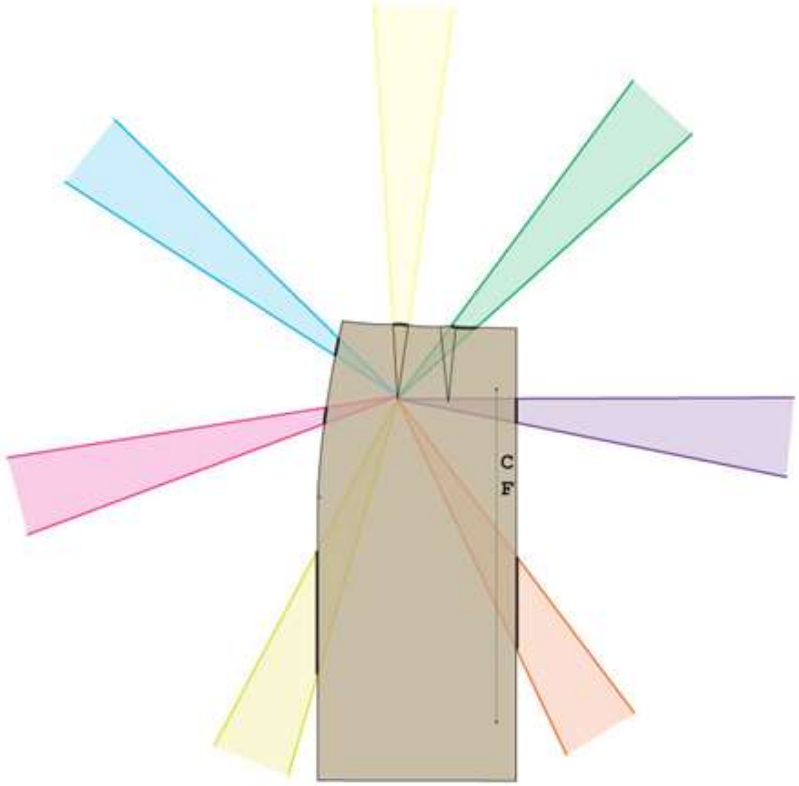


Moving the dart elsewhere in the skirt

OK, so we manipulated the dart to move it from the waist to the skirt. However with the Bodice Front we could move it all the way around the Bodice Front, not just from one side to the other. Can we do this with the skirt?

In Figure 11 below, let's look at what we get.

Figure 11: Moving darts in the skirt?



The questions are: Does it makes sense to move the darts there? What will it look like with a dart there? Will it look strange and make a garment that nobody would dream of wearing? Rather than a dart, would a design line be better? Would a design line elsewhere achieve a better look? All of this comes down to design and what you want to create; there's nothing stopping you moving that dart into any of those places, if that's the design you want. But...it might not be a good idea for a range of reasons.

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Summary

Flat pattern technique is methods of developing different patterns by pivot method and slash spread method. Locating the bust point and shifting darts are most important in the lesson. The darts can be shifted to any part of the pattern.

Self check -1	Written test

State if the following statements are true or false.

1. With the help of a pivot method the waist line dart can be shifted to shoulder ( )
2. Flat pattern technique can be used to prepare the patterns in garment construction. ()
3. Dart can be shifted by slash and spread method ( )
4. The dart can be moved from one place to another place ( )

II. Test your understanding

Fill in the blanks with correct answers

1. _____ method is used in overlapping the dart.
2. Fullness can be provided in a garment with the help of gathers, _____ tucks etc
3. Dart is a _____fold of fabric stitched on the wrong side of the garment which responsible for fit of the garment (triangular)
4. A process of smoothing, shaping and rounding angular lines along a seam and marks made on the pattern or muslin is called_____. (trueing)
5. Dart point means it is the _____ of the dart. (end)

Short Answer Type Questions

1. Name the techniques used in flat pattern method
2. What is pattern alteration?
3. Write two uses of pivot method.

Long Answer Type Questions

1. Explain the Pivot method
2. Write in detail about slash and spread method.
3. What are the principles involved in fat pattern designing?
4. Describe the various pattern making tools.

Choose the best answer

1. Which one of the radiating multiple darts has the greatest excess?
   A. Darts directed to the side of the center dart
   B. Darts do not radiate
   C. Darts directed to the bust point
   D. All have equal dart intake
2. What is a tuck-dart?
   A. Half-stitched dart legs
   B. A divided dart
   C. Not a special dart
   D. A dart with three legs
3. What is a graduated dart?
   A. Shared dart excess with diminishing lengths
   B. A dart that moved up one grade
   C. There is such dart
   D. A partially stitched dart

Information Sheet-2	Understanding Pattern makingterminologies

Before starting the pattern making different terminologies used in the process of pattern making should be clearly understood. Given below are some important terms related to leather garment pattern designing

Components of a garment:

Front, Back, Sleeve, Collar, cuff, pocket, waistband, facing, lining etc.

Construction Details:

Darts, pleats, button holes, front opening, type of sleeve, type of color etc.

Pattern details:

Notches, Centre front, Centre back, Hem, style lines, cut line, seam line, folding lines etc.

Style details:

Model name, model number, Piece name, number of times each pattern is cut, position of grain line etc.

Pattern making methodology:

Basic block, draft/construction pattern, final pattern, production pattern, grading

Classification of leather garments:

Jackets, over coats, long coats, waist coats, skirts, pants etc.

The following are terminologies are also used in pattern making:

- **Grain**: the direction in which the yarn is woven or knit (lengthwise grain or warp, crosswise grain or weft)
- **Selvedge:** thenarrow, firmly woven, and finished strip on both lengthwise grain edges of the woven fabrics.
- **Muslin**: a plain woven grey fabric made from bleached or unbleached corded yarns in variety of weights.
- **Bowing:** condition of fabric that is off grain due to yarns not at true right angle with each other.

- **True bias**: - The angle line that intersects with the lengthwise and crosswise grains at a 45° angle. True bias has maximum give and stretch, easily

conforming to the figure's contours. Flares, cowls, and drapes work best when cut on true bias.

- **Pattern Grading:** proportionally increasing or decreasing the size or shape of an original pattern within a give size range.
- **Land Marks:** designated points around the body that corresponds with those of the form.
- **Dart:** a wedge shape cut out in a pattern used as a means of controlling the fit of the garment. It has legs, intakes and points.
- **Ease:** the even distribution of fullness without forming gathers.
- **Template:** patterns one fourth or one half the regular pattern.
- **Horizontal balance line**: A straight line parallel with the floor.
- **Block Pattern:** it is the foundation pattern that reflects the size, shape and posture.
- **Style Number:** it is an identification number used to code the pattern set.
- **Notches:** It is illustrated as a straight line with a cross mark at the end. It is mainly used for identification of front and back, identification of joining parts, ease and gather control, center line and seam allowance.
- **Seam allowance:** It is an extra part added on the final pattern for proper stitch of the joining parts with sufficient allowance and proper joining of parts.

- A **complete pattern** has to consisted the information like:Grain Line, Part Name, Style Number, Pattern Size, Number of Pieces, Cut Symbol, Notches, Punches/Drill Holes, Seam Allowance

Self check-2	Written test

Answer the following question according

1. What are the components of garment?

2. List and define at least 10 pattern terminologies?

Information Sheet-3	Impact ofpatternmakinginproduction

Impact of pattern making on production

There are many factors in the garment making process, such as thickness of materials, seam allowance, type of stitching, and type of fitting etc. influence the quality of the final garment. Even though these factors are important while carrying the particular operation the pattern making process has an influence on all others factors. For example the seam allowance is generally maintained as 10 mm in leather garment industry but in case of turnover seam one part of the panel has to be given 5 mm and the other part has to be given 10 mm seam allowance. Also the value of the seam has to be clearly indicated by notches on both ends of the pattern. Otherwise if the tailor assembles the components with 10 mm seam it affects the overall measurements of the garment and leads to rejection. In order to avoid these kinds of problems in the production the pattern has to be made with all necessary information indicated clearly. It helps the person doing the next operation such as cutting, assembly to carry out the process with required quality and finish.

Another important factor is the design for manufacture. Sometimes the designs or sketches made by the designers may not be feasible for production because of the intricacies and complications in the design. Hence the designers should understand about the different materials and production processes before creating the design. Also the pattern maker has to make the patterns keeping the above factors in mind so that the production problems can be eliminated at the design stage itself to a maximum extend.

Sample making is one of the main operations which can be used to perfect the designs made. Generally during the designing of any garment the samples are made and verified for their fit and perfectness. If there is any shortfalls the same can be corrected in the patterns so that there will not be any problem during the actual production.

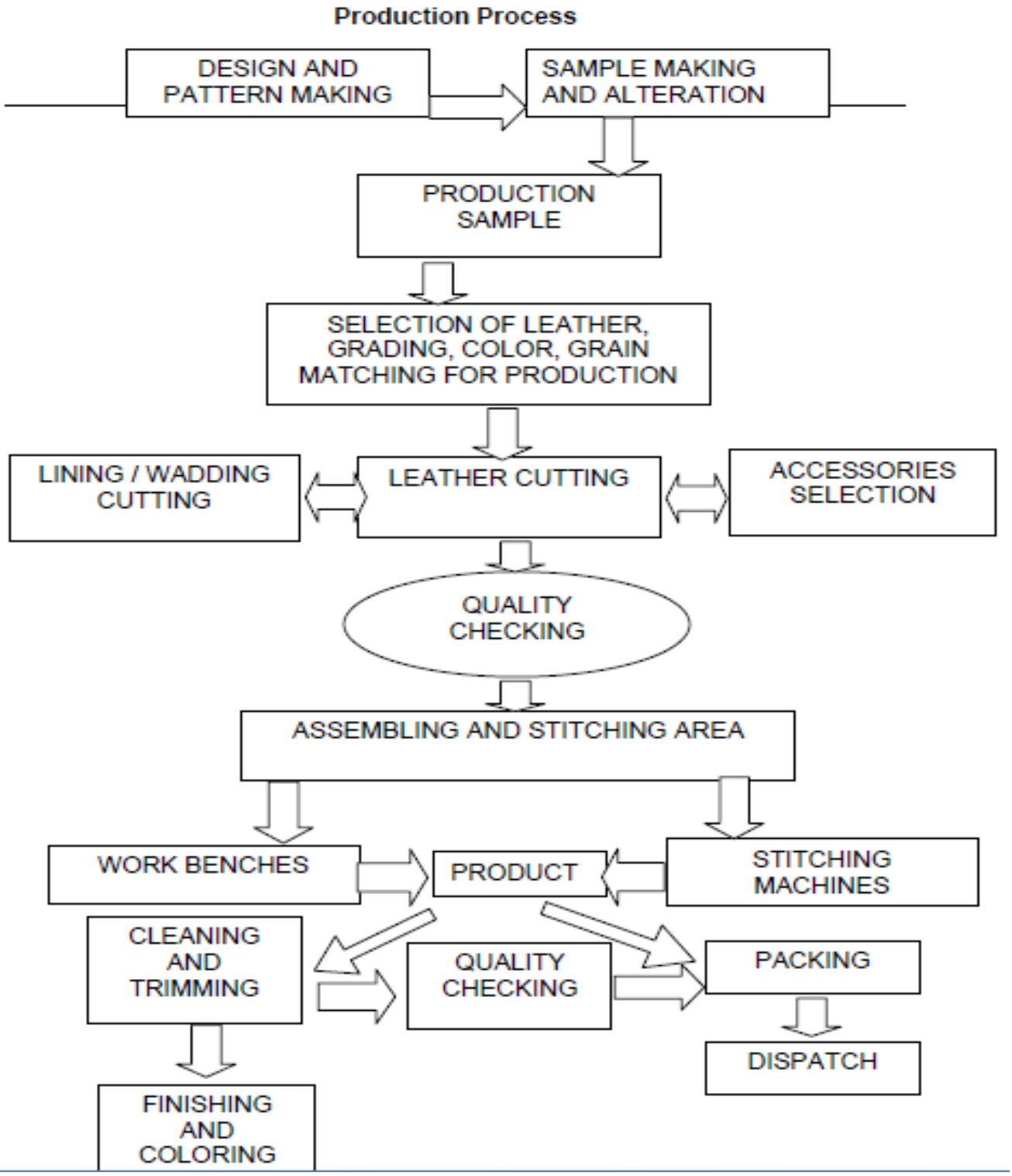
It is one of the most important parts of garment manufacturing industry. Pattern making is a highly skilled technique which calls for technical ability, sensitivity for design interpretation and a practical understanding of garment construction.

Pattern making is a bridge function between design and production

A correct pattern helps to make an **appropriate sample**. Pattern contains clear **information** of construction**, sewing allowance, grain line & fabric cutting direction.** It helps to get more order from buyers. Pattern suggests the factory to estimate the resources required for construction of a particular style**.** It is one of the most important parts of garment manufacturing industry. Pattern making is a highly skilled technique which calls for technical ability, sensitivity for design interpretation and a practical understanding of garment construction.

Pattern making is a bridge function between design and p

Technique of production process is given below:



Self-Check -3	Written Test

Directions: Answer all the questions listed below

1. What is the Impact of pattern making on production?
2. What are the pattern construction clear information?

Information Sheet-4	Purposeandadvantageof different typesof patterns

2.4 Purposes And Advantage Of Different Types Of Patterns

Pattern making and pattern cutting are the most Important and fundamental in manufacture of leather garments. It forms the very core and the beginning.

Before making any leather garment the geometrical shapes of its parts are first cut in paper. Such patterns, which are cut in paper, are called paper patterns. The paper patterns are stuck on thick millboard or a white board, using adhesive and then cut into cardboard patterns. By using the cardboard patterns, leathers, linings, wadding and reinforcements needed for making leather garments are cut. The economy of leather garment depends upon pattern cutting, which determines the cost of production. Since patterns are cutting guide, it must be very accurate. It helps to ensure that the materials are cut accurately without any wastage. The art of pattern cutting requires anticipation, sound judgment, and cultivated style of approach with a sense of quality control.

Generally in pattern making for leather garments, as a first step basic block or master draft is made based on standard body measurement/mannequin measurements. And from that enlargement or ease is incorporated. After that individual pattern pieces are extracted. Different types of patterns extracted are 1) Leather cutting patterns, 2) Lining cutting patterns, 3) Wadding cutting patterns and 4) Reinforcement cutting patterns.

2.4.1 Leather Cutting Patterns

Leather cutting patterns are used to cut the leather panels, which are used for making the outer shell and also for facing panel in the inner shell. Basic design of the garment and providing style lines appropriately decides the size of individual leather panels and also this is one of the factors influencing the cutting value. The cost of manufacturing leather garment is influenced by the leather cutting to a major extend. Hence leather-cutting patterns are very important in this process. After extracting the patterns from the enlarged pattern, different allowances such as seam allowance, folding allowance are provided and markings such as notches are provided to make it final cutting pattern

In the leather cutting section the Labor or staffs has to maintain the quality of the leather/material – grain, color, size, and quantity according to the requirements of the

client. They have to maintain proper norms for cutting the leather and wastage has to be minimized. The Leather Cutting Pattern can be given a specific colour code to enable easy identification.

This patterns help for the productions. The components pattern included all over allowances such as Folding allowances, Underlay allowances and Stitching allowances. In the leather cutting section the Labor or staffs has to maintain the quality allowances.

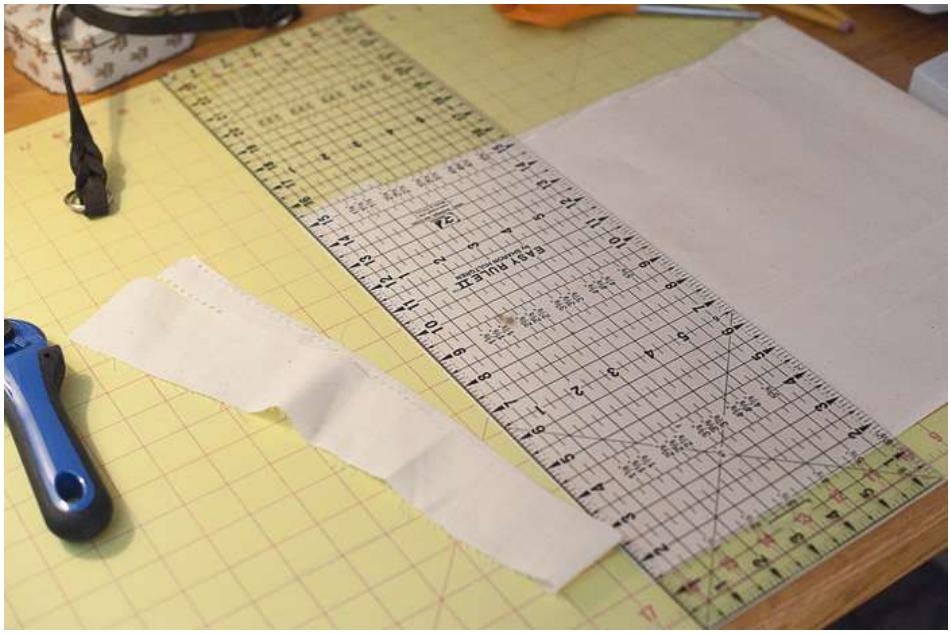
In the leather cutting section the Labor or staffs has to maintain the quality of the leather/ material – grain, color, size, and quantity according to the requirements of the client. They have to maintain proper norms for cutting the leather and wastage has to be minimized. The safety norms have to be maintained according to the industry act. To make less number of products, cardboard patterns are used for cuttingcomponents. To make more number of products, aluminum or galvanized metal patterns are used for cutting components. To manufacture in bulk, the cardboard patterns of the product are converted into clicking dies and the components are cut in the hydraulic clicking press. The Leather Cutting Pattern has to be marked by the RED PEN/ COLOUR.

1.4. 2 Lining Cutting Patterns

The lining cutting patterns are used to cut lining components which makes the inner shell of the garments. The lining patterns are made of single or two panel for front and back lining because of the use of textile materials for lining.

Lining patterns also should have notch marks, pocket marking etc. to enable the cutting & assembly process easier. The lining patterns are generally shorter in size compared to leather patterns but at the same time the lining patterns have to be provided with sufficient ease to accommodate and retain the shape of the garment. In the lining cutting section the Labor or staffs has to maintain the quality of the lining material – upper part, color, size, quantity according to the requirements of the client.

They have to maintain proper norms for cutting the lining and wastage has to be minimized. The safety norms have to be maintained according to the industry act. To make less number of products, cardboard patterns are used for cutting components. To make more number of products, aluminum or galvanized metal patterns are used for cutting components. A colour coding system can be given for lining patterns also.



The components pattern included all over allowances such as Underlay allowances and Stitching allowances. But it should be shorter in size from the exact pattern. In the lining cutting section the Labor or staffs has to maintain the quality of the lining material – upper part, color, size, quantity according to the requirements of the client. They have to maintain proper norms for cutting the lining and wastage has to be minimized. The

safety norms have to be maintained according to the industry act. To make less number of products, cardboard patterns are used for cuttingcomponents. To make more number of products, aluminum or galvanized metal patterns are used for cutting components. To manufacture in bulk, the cardboard patterns of the product are converted into clicking dies and the components are cut in the hydraulic clicking press. The Lining Cutting Pattern has to be marked by the BLACK PEN/ COLOUR.

1.4.3 Wadding Cutting Patterns

Wadding is the material attached with lining for the purpose of thermal insulation as well as for giving shape to the garment. The wadding is attached with lining using a special stitching called quilting. Generally these patterns can be derived from lining patterns with extra allowance for accommodating the volume. Wadding patterns has to be marked with a colour code for easy identification.

1.4.4 Reinforcement cutting patterns

Reinforcement materials are used in garments to give stiffness & retain the shape of some of the garment components such as collar, cuff etc. Reinforcement materials are made of textile or cellulose martial with a wax coating. Upon heating/ Ironing the reinforcement material gets attached to leather panel hence it is also called as self-fusing material. Patterns used to cut the reinforcement material are called reinforcement cutting patterns. This pattern has no allowances of folding, stitching and underlay. And it should be shorter than the exact patterns of the components.

Normally card boards are used for making of the reinforcement cutting patterns. To make more number of products, aluminum or galvanized metal patterns are used for cutting components. Some times for bulk production the clicking dice can be used to cut the reinforcements.

Advantages:

1. A good pattern of the right size which has been adjusted to suit your individual requirements will enable you to obtain a perfect product.
2. A pattern prepared on thick paper or cardboard can be preserved for a long time and can be used over and over again.
3. By manipulating the basic pattern pieces it is possible to produce patterns for complicated designs.

4. A paper pattern of a particular size can be used to make new patterns of proportionately larger or smaller sizes by following a systematic procedure called "grading".
5. Cutting with the help of a cardboard pattern is quicker and easier on the leather, fabric and other materials for small batch production.
6. Use of a cardboard pattern will enable you to cut the garment pattern with a minimum amount of material because it is possible for you to tryout the placement of pattern pieces in different ways till you have found the most economical way to keep them.

This pattern has no allowances of folding, stitching and underlay allowances. And it should be shorter than the exact patterns of the components. Normally the EVA /

RUBBER SHEET, TEXON / FLEXO BOARD, FOAM, SELF FUSING CLOTH, BAKRAM for using of the reinforcement cutting patterns. For bulk production the clicking dice can be used to cut the reinforcements. . To make more number of products, aluminum or galvanized metal patterns are used for cutting components. To manufacture in bulk, the cardboard patterns of the product are converted into clicking dies and the components

are cut in the hydraulic clicking press. This pattern has to be marked by the GREEN PEN/ COLOUR.

1. A good pattern of the right size which has been adjusted to suit your individual requirements will enable you to obtain a perfect product.

2. A pattern prepared on thick paper or card board can be preserved for a long time and can be used over and over again.

3. By manipulating the basic pattern pieces it is possible to produce patterns for complicated and original designs.

4. A paper pattern of a particular size can be used to make new patterns of proportionately larger or smaller sizes by following a systematic procedure called "grading".

5. Cutting with the help of a paper pattern is quicker and easier than on the leather, fabric and other materials.

6. Use of a paper pattern will enable you to cut the bag pattern with a minimum amount of material because it is possible for you to try out the placement of pattern pieces in different ways till you have found the most economical way to keep them.

Self check-4	Written test

Name: _____ **Date:** _____

Instructions:

Write all your answers in the provided answer sheet pages 18-19

Directions: Answer all the questions listed below.

Part- A

Fill in the blanks: (5 * 1= 5)

1. Garment pattern making is a process of fitting _____dimensional patterns on to a _____ dimensional human body.
2. Important pleats used n garment pattern making are _____and _____.
3. To make more number of products _____. or_____ metal patterns are used for cutting components.
4. Cutting with the help of _____ pattern is quicker and easier on the leather, fabric and other materials for small batch production.
5. _____ materials are used in garments to give stiffness & retain the shape of some of the garment components.

PART- B

True or False: (5 * 1 = 5)

1. To make more number of products, cardboard patterns are used for cutting components.
2. The cost of manufacturing leather garment is influenced by the leather cutting to a major extend.
3. The lining patterns are generally shorter in size compared to leather patterns.
4. By manipulating the basic pattern pieces it is possible to produce patterns for
5. Complicated designs.
6. Reinforcement pattern has to be provided with seam allowance and Underlay allowance.

PART- C (5 * 1 = 5)

1. The pattern in which the seam allowance is not needed.

A. Leather cutting pattern

B. Lining cutting pattern

C. Wadding cutting pattern

D. Reinforcement cutting pattern

2. Identify the material used as reinforcement.

A. Measuring Tape

B. Self Fusing

C. Nylon Tape

D. Buckle

3. List any five component of a leather garment

4. Name any five-construction details of garment pattern making process

5. Wadding material is used for _____

Answer sheet

Score = _____

Rating: _____

Name: _____ **Date:**_____

Test I. True or False

1. _____
2. _____
3._____
4._____
5._____

Test II: Short Answer Questions

1. _____
2. _____
3. _____

_____

_____

_____

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4. _____

_____

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_____

5. _____

Note: Satisfactory rating = 9 and above;

Unsatisfactory rating = below 9 points.

You can ask your teacher to correct your work.

Information Sheet-5	Aspects of patterns

1.5 Aspects Of Patterns

Pattern making and pattern cutting are the most important and fundamental in fabricating leather garments. Aspects of patterns are derived from the names of components of a garment. The aspects will vary according to the type of garment. For example the Jacket pattern has the aspects such as Front, back, sleeve, yoke etc. But the skirt or pant pattern contains the aspects front, back and waistband. Drawings of different aspects of garments are given below

Yoke

A **yoke** is a shaped pattern piece which forms part of a garment, usually fitting around the neck and shoulders, or around the hips to provide support for looser parts of the garment, such as a gathered skirt or the body of a shirt. **Yoke** construction was first seen in the 19th century.

What is a **yoke**? If a shirt, blouse or dress has a separate pattern piece for the shoulder area that attaches to the **front** or back of the garment; this piece is Calles a **yoke**. A **yoke** can be in the **front** or back shoulder area only.

Front & yoke:

The pattern used to cut the front portion of the garment is called front pattern.
In leather garments generally the front portion will not be single piece. The front will be divided in to two or three panels by the style lines. The other advantage of dividing into panels is the increase in material utilization and cutting value of leather. The top portion of the front pattern divided as discussed above is called as front yoke

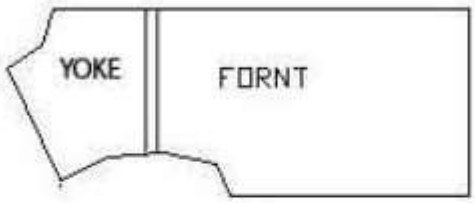
Back & Yoke:

The pattern used to cut the back portion of the garment is called back pattern.
The back pattern is also divided in two numbers of panels according to the style and customer needs. The other advantage of dividing into panels is the increase in material utilization and cutting value of leather. The top portion of the back pattern divided as discussed above is called as back yoke

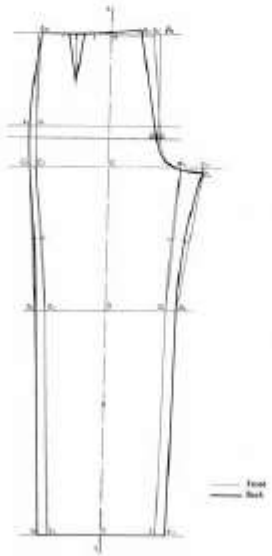
Patterns of front back & yoke

Jacket patterns:

In the jacket the front and back portions can be differentiated by seeing the neck line and arm hole line. The front pattern has a deep curve in the neckline as well as arm hole line compared to back pattern. Also the bust dart is located in the front pattern

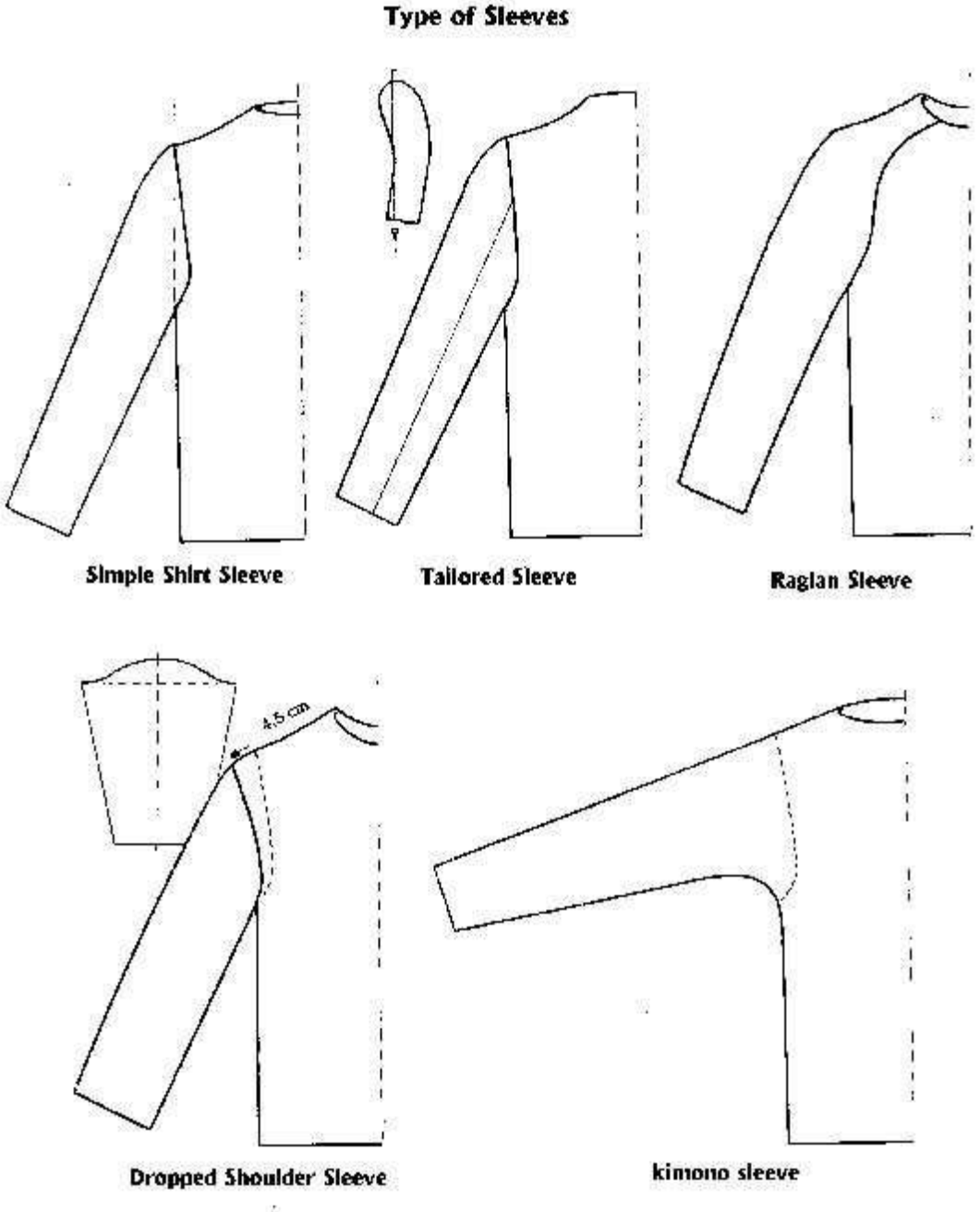


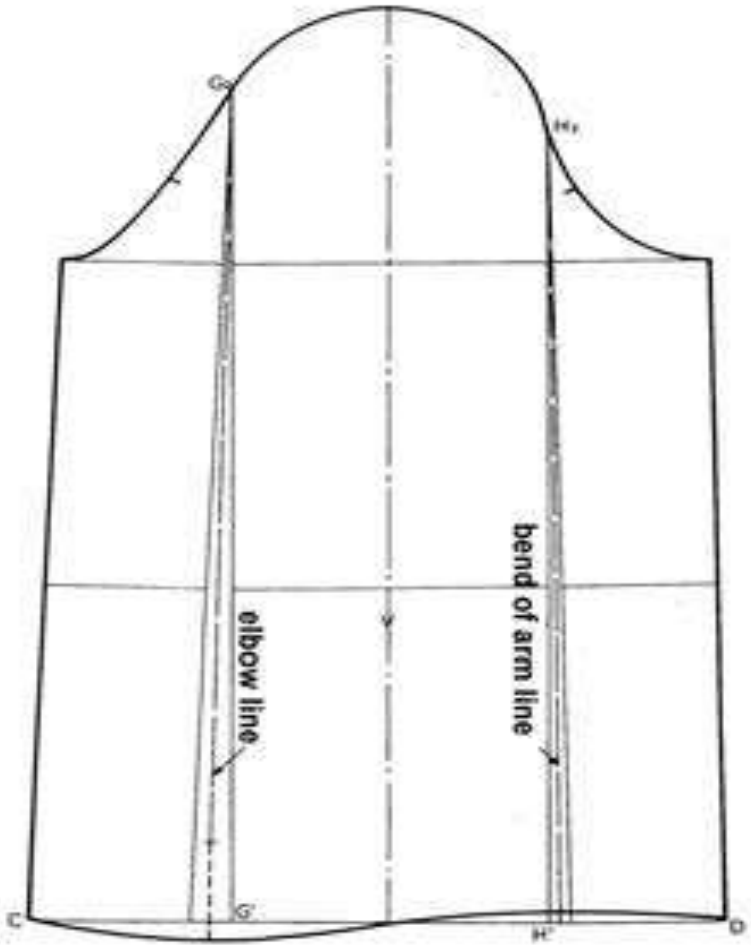
Pant patterns

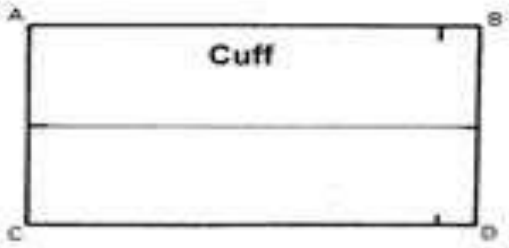


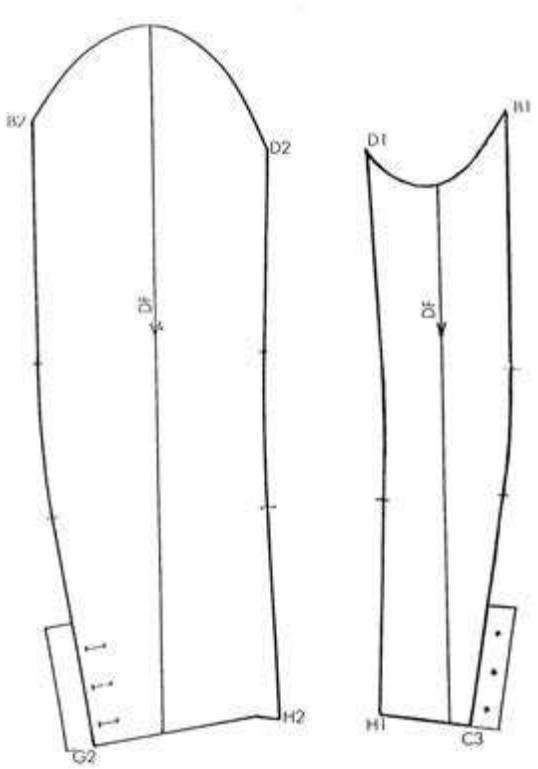
Sleeve & cuff:

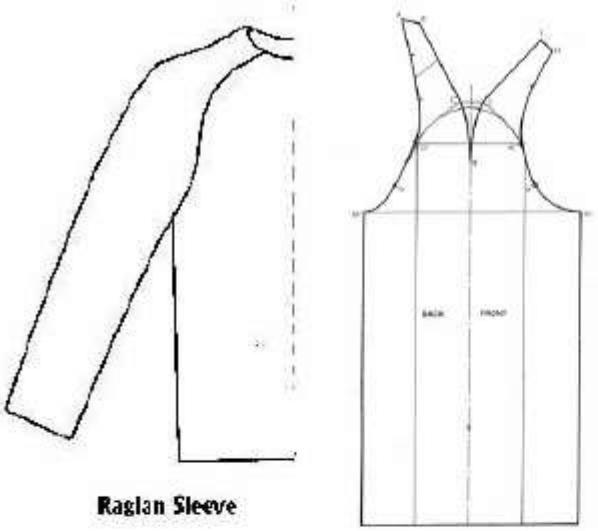
For cutting the components of the sleeve portion of the garment is called sleeve pattern. There are different types of sleeves such as simple shirt sleeve, tailored sleeve, raglan sleeve are used in leather garments. As like front & back sleeve panel may also be divided to number of panels. Cuff is the component attached at the bottom of the sleeve to control the sleeve opening at the bottom.

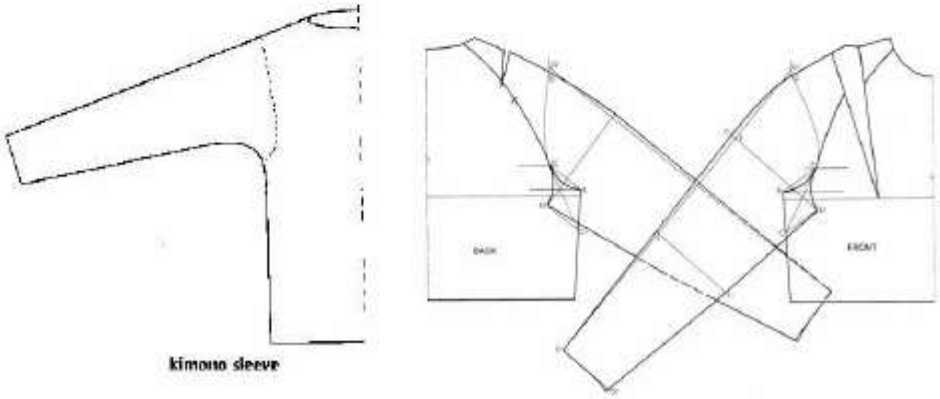



elbow line
bend of arm line

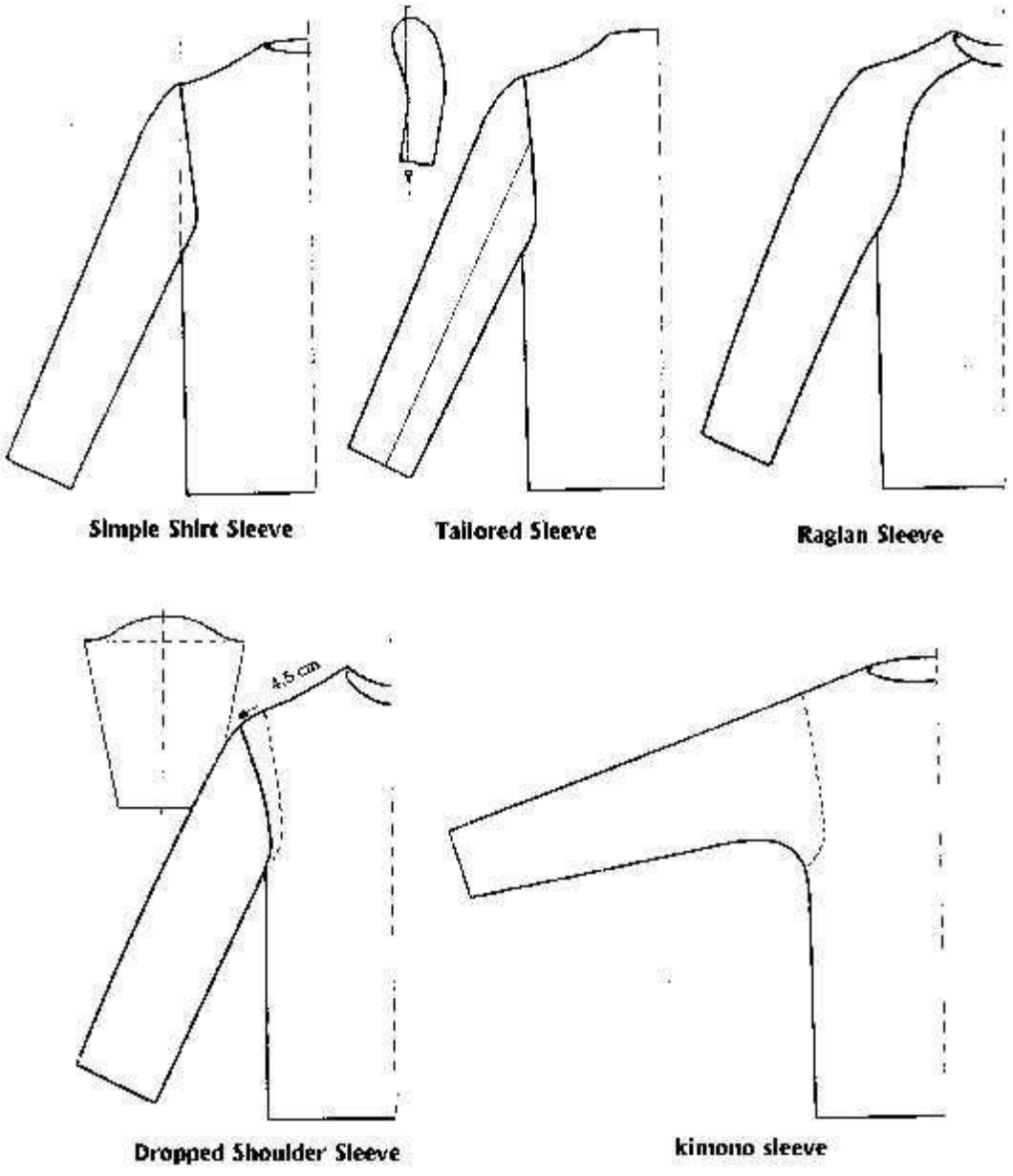

Cuff


D2
DF
H2
G2
D1
H1
DF
H1
C3


Raglan Sleeve


kimono sleeve

Type of Sleeves



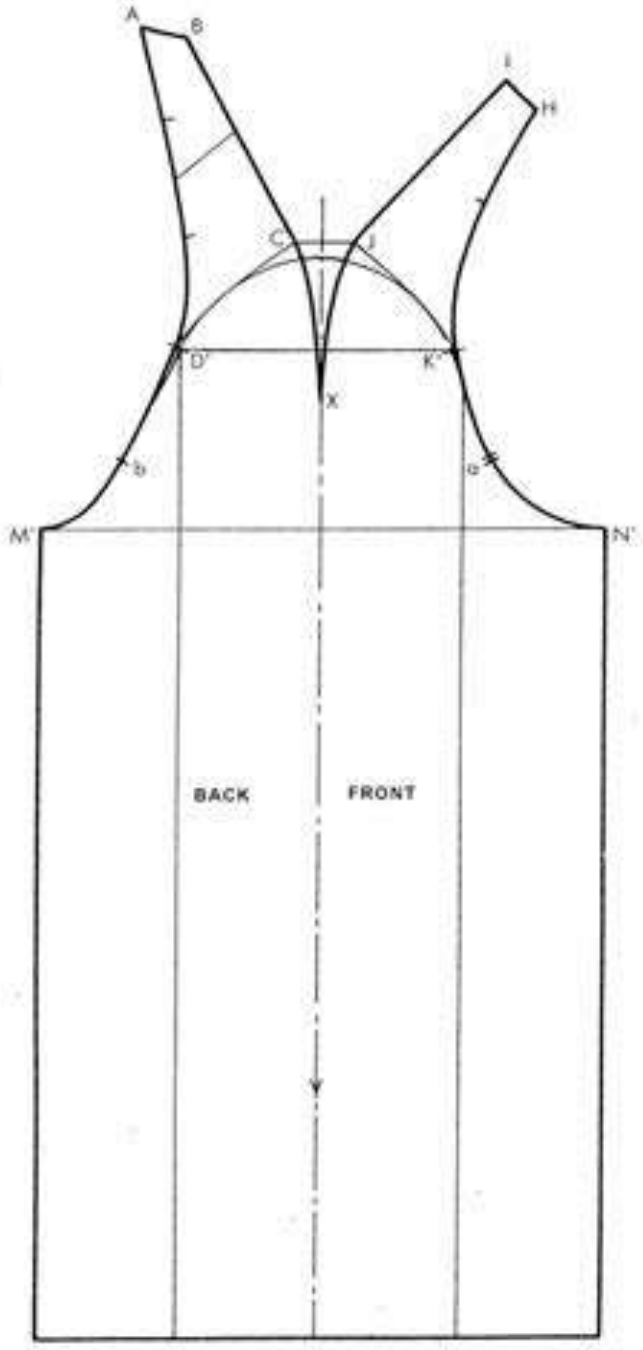
Simple Shirt Sleeve

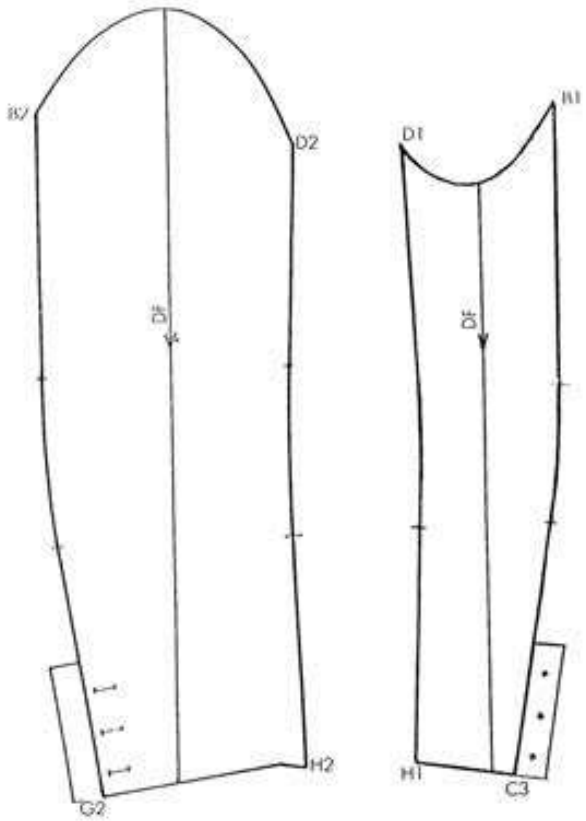
Tailored Sleeve

Raglan Sleeve

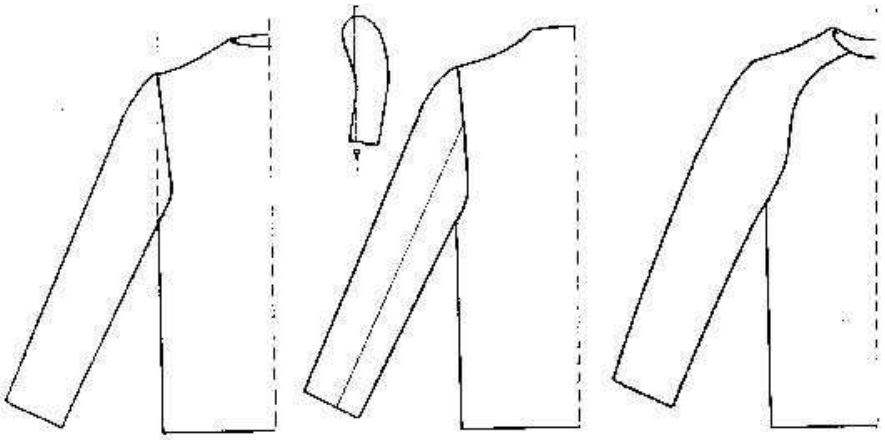
Dropped Shoulder Sleeve

kimono sleeve

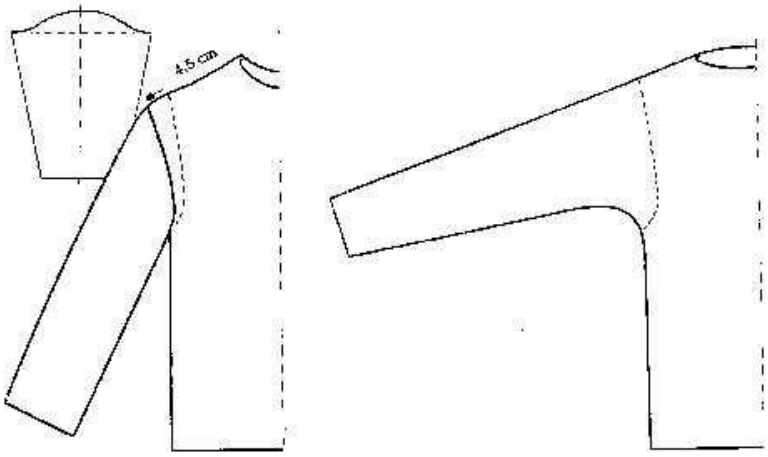

A
B
I
H
C
J
D'
K'
X
b
c
M'
N'
BACK
FRONT


B2
D2
DF
H2
G2
D1
B1
DF
H1
C3

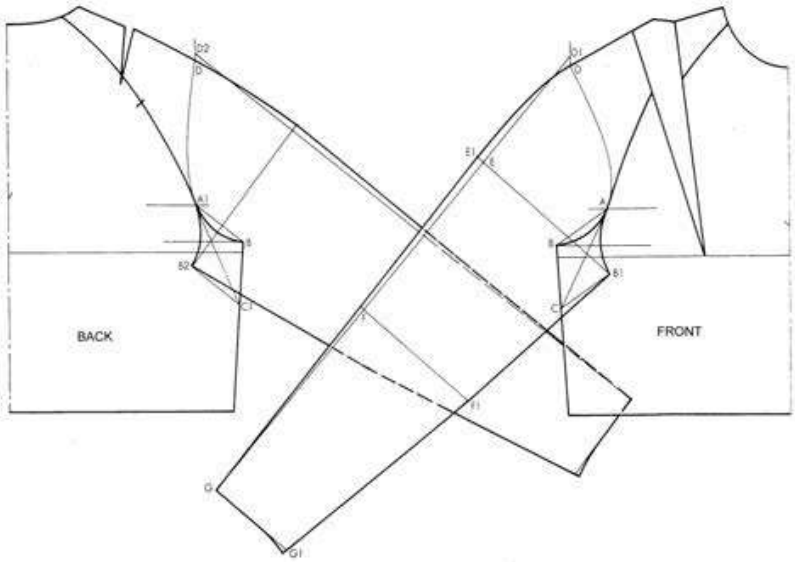
Type of Sleeves



Simple Shirt Sleeve | Tailored Sleeve | Raglan Sleeve



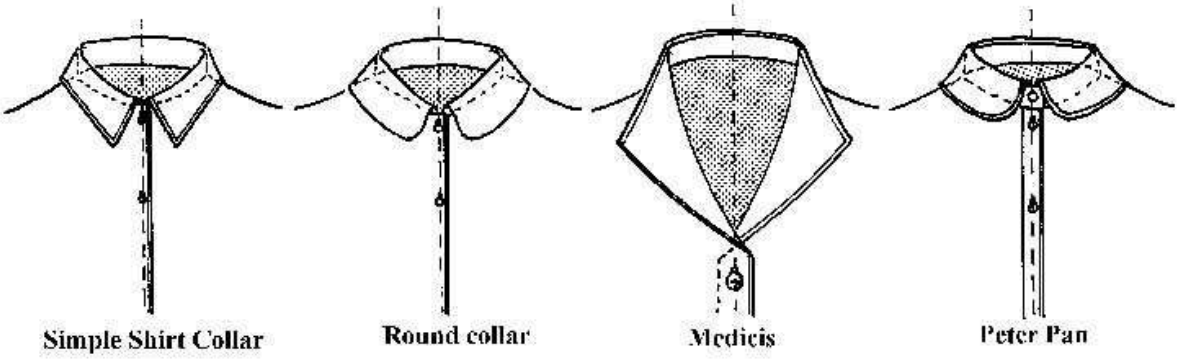
Dropped Shoulder Sleeve | kimono sleeve

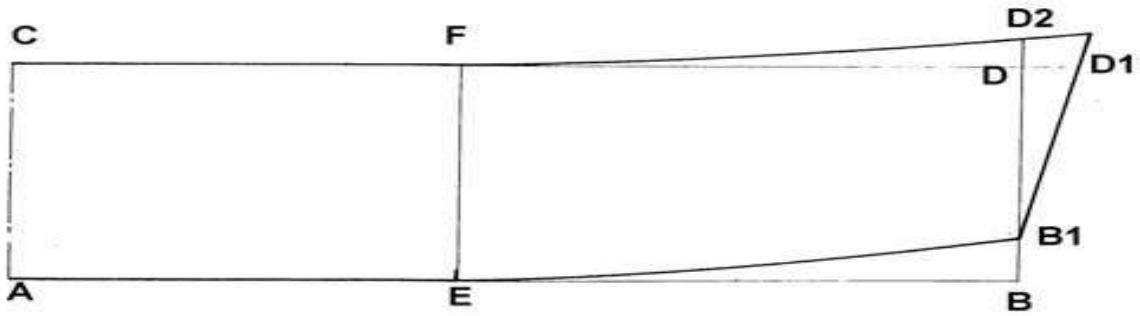


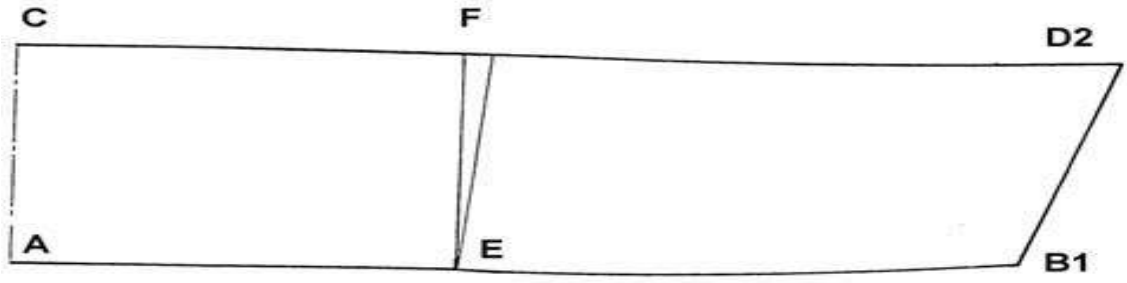
- **Collar**

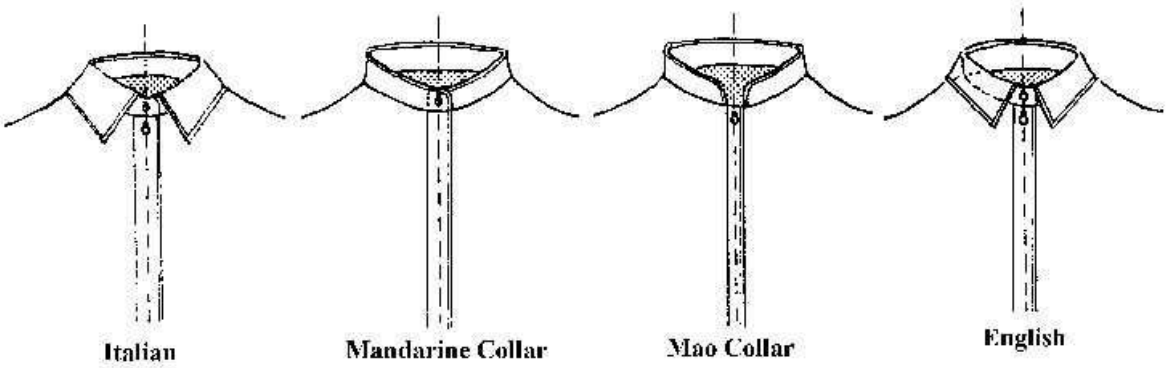
Collar is the component attached at the neck portion of the front & back panels. Pattern used to cut the collar panel is called collar pattern. The length of the collar is equal to the neck line measurement of front & back patterns.

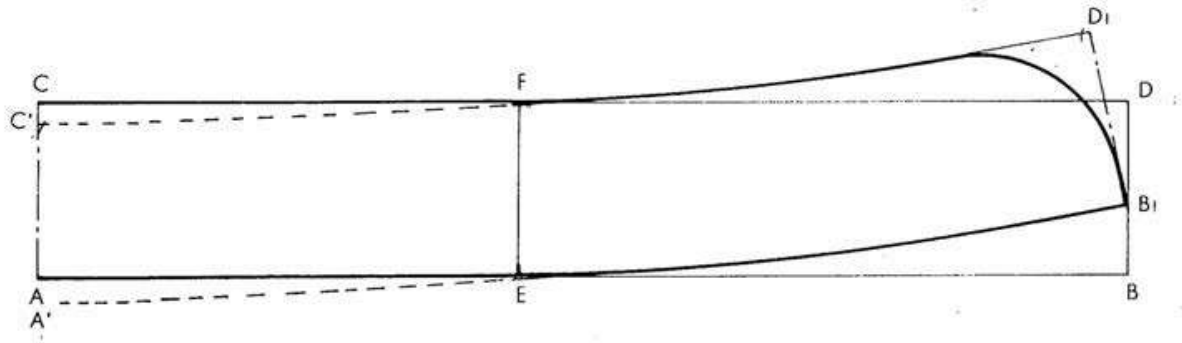
There are different types of collars used in leather jackets. The pattern of the simple shirt collar is shown below.

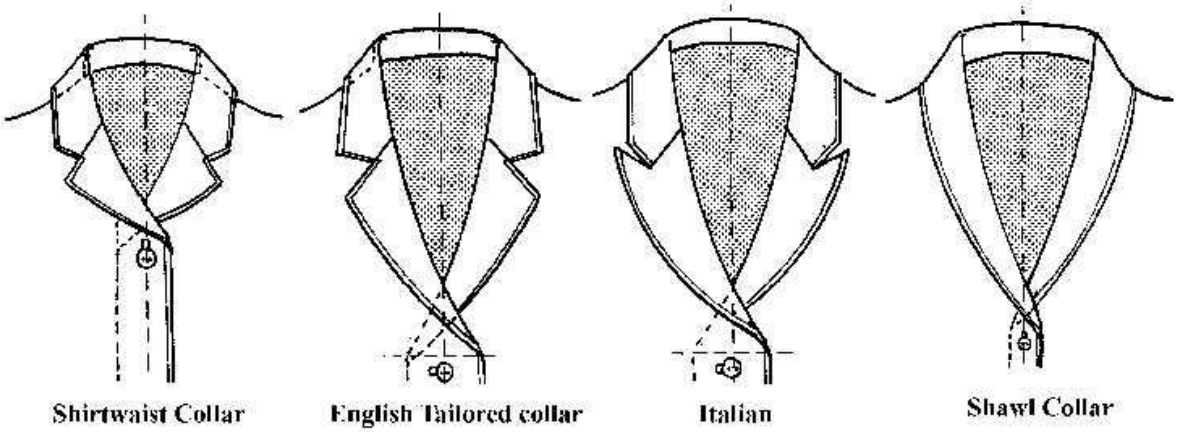


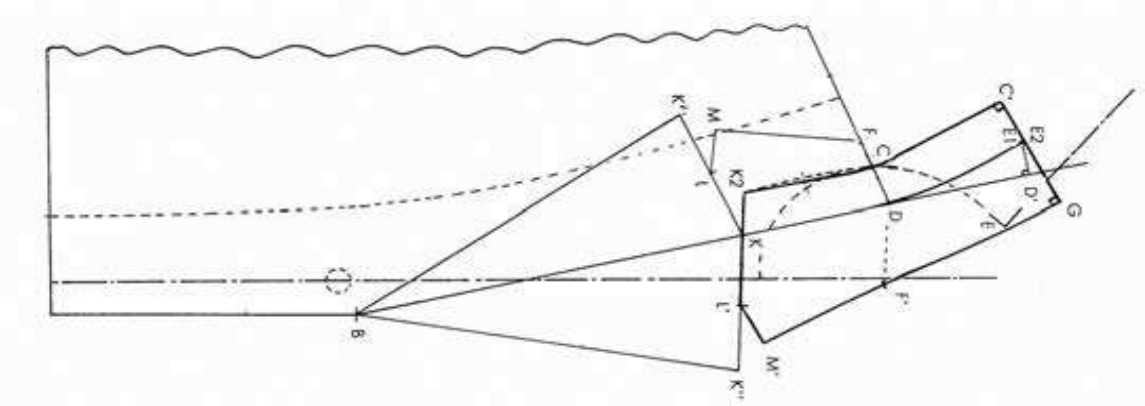


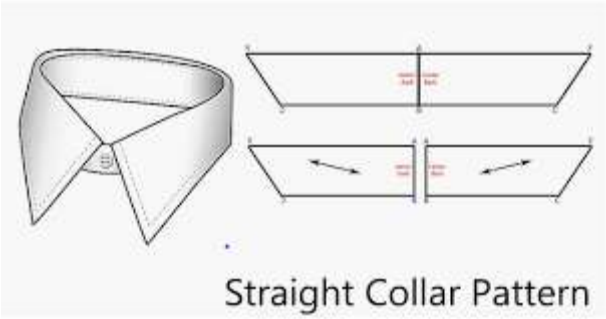



Italian
Mandarine Collar
Mao Collar
English


C
C'
F
D1
D
B1
A
A'
E
B


Shirtwaist Collar
English Tailored collar
Italian
Shawl Collar




Straight Collar Pattern

operation Sheet-2	Make Collar Patterns

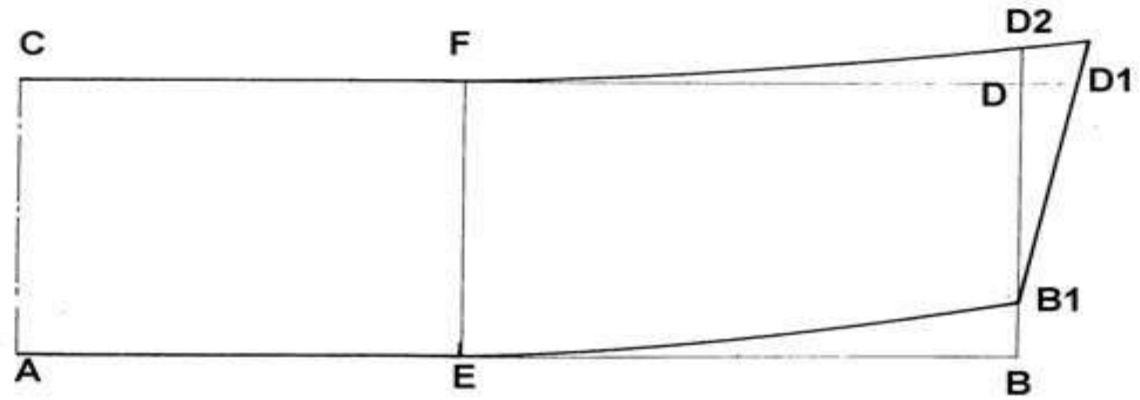
How to Make Collar Patterns:

In this operation sheet making of simple patterns of two types of collars used in leather garments are explained. Follow the procedure step by step to make the following patterns.

Construction of simple shirt collar

Frame construction:

- AB = ½ neckline measurement.
- AC = total width at centre back (example 6 cm), AC is perpendicular to AB.
- Draw rectangle ABCD.
- AE = CF = ½ back neckline measurement



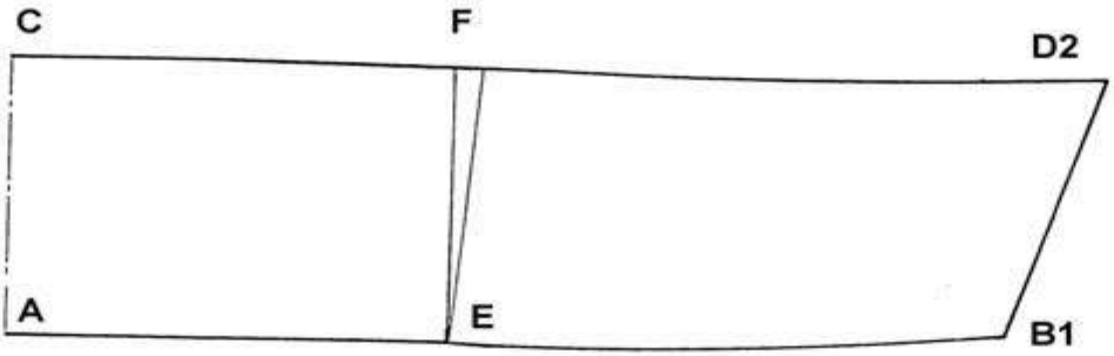


Fig ___ : Simple shirt collar

Tracing collar:

- BB1 = 1/15 of AB.
- Join EB1 by a curve.
- DD1 = 1cm (for example).
- DD2 = 0.75 cm (fox example).
- Draw collar point passing through points F D2 D1 B1
- Outline collar. Cut along FE and space at F 0.5 cm. Retrace lines CFD2 and AEB1**.**

Construction of Mandarin collar

- Enlarge the base depending on garment desired and measure neckline value of garment

Frame construction:

- AB = ½ neckline measurement.
- AC = collar width perpendicular to AB.
- AC = 3 cm.
- Draw rectangle ABCD**.**
- AE = CF = ½ back neckline measurement.

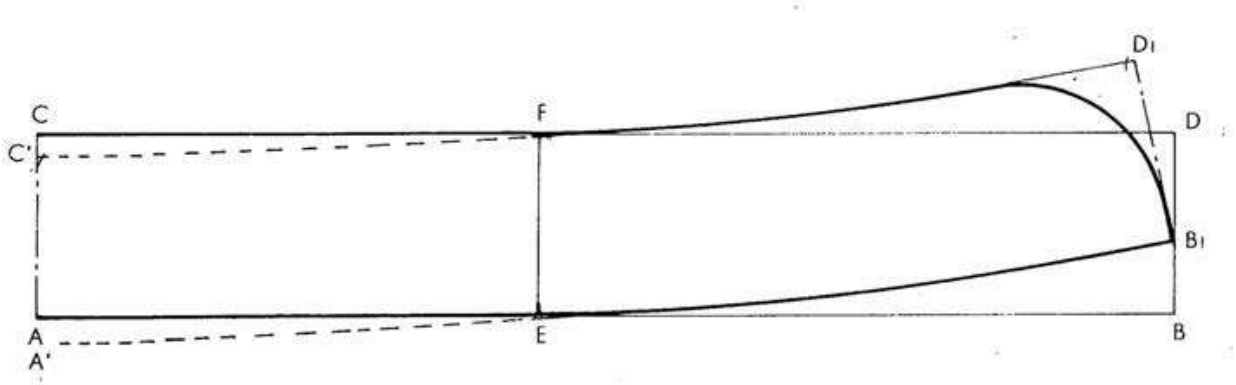


Fig __ : Mandarin collar

Collar construction:

- BB1 = 1/15 of AB.
- Join EB1 using a curve.
- From B1, draw line B1D1 perpendicular to line EB1.
- B1D1 = BD.
- Join FD1 and round off angle D1 by using a curve.

Note:

CA can be lowered onto C'A' by 0.5 cm in order to give collar a curve.

operation Sheet-3	Flaring a Straight Skirt Pattern

Flare 1:

- Outline a back and front skirt base
- Extend a parallel line from the middle of the darts to the skirt bottom

Back:

- Retrace the back dart along 9 cm in order to give the same amount of flare as in front
- Cut upward from skirt bottom along the line extended from the middle of the dart up to 9 cm below waistline. Point A. Pin shaded part at Centre back
- Flare 5 cm at skirt bottom then pin down
- Flatten pattern. As a result, the back dart automatically closes and becomes smaller

Fig____: Flare no. 1

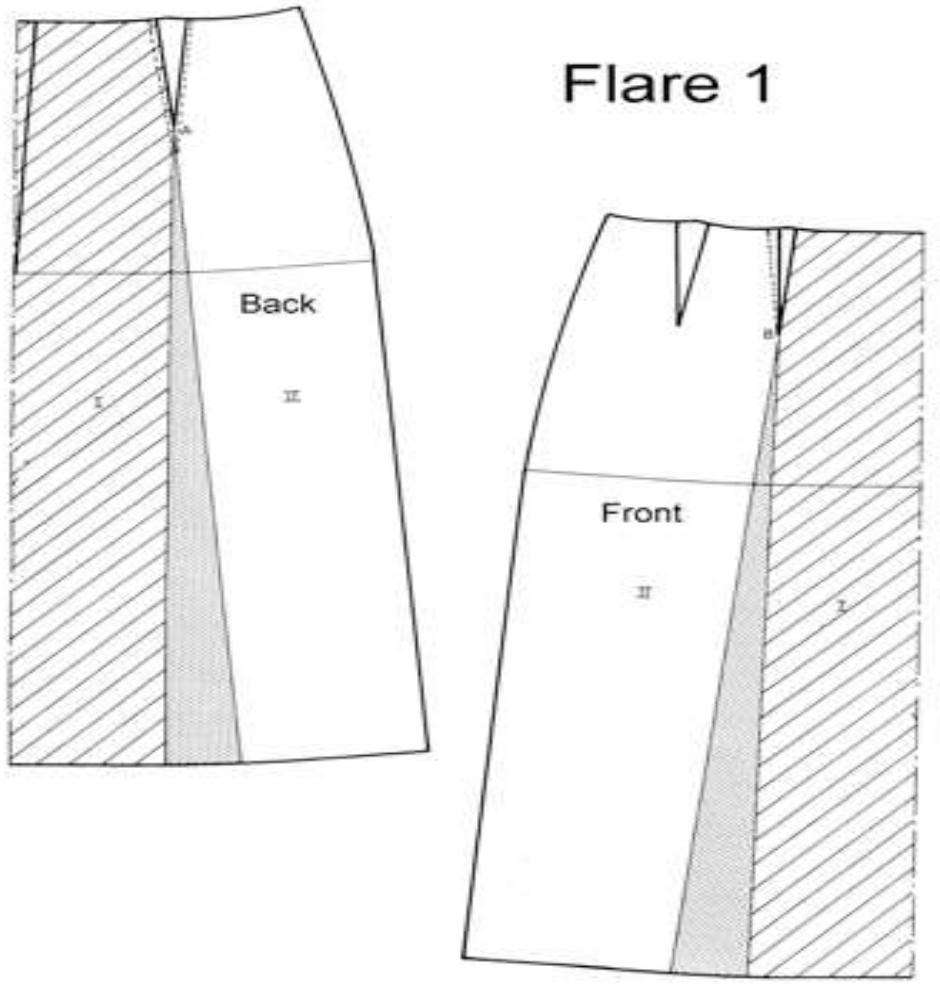


Fig____: Flare no. 1

Front:

- Cut upward from skirt bottom along the line extended from the middle of the dart up to 9 cm below waistline. Point B. Pin shaded part at centre back
- Flare 5 cm at skirt bottom, then pin down side part
- Flatten pattern
- As a result, the first front dart closes automatically and becomes smaller
- Retrace skirt bottom with a slight curve and balance out darts
- Retrace waist and top points of darts

Flare no. 2

- Draw initial datum same as for Flare no. 1

- Slant out the sides of the back and front (1/2 the width of No. 1 flare, that is 2.5 cm)
- From here, draw a straight line up to hip line, blending into side curve.
- Retrace the bottom of the skirt in a slight curve.

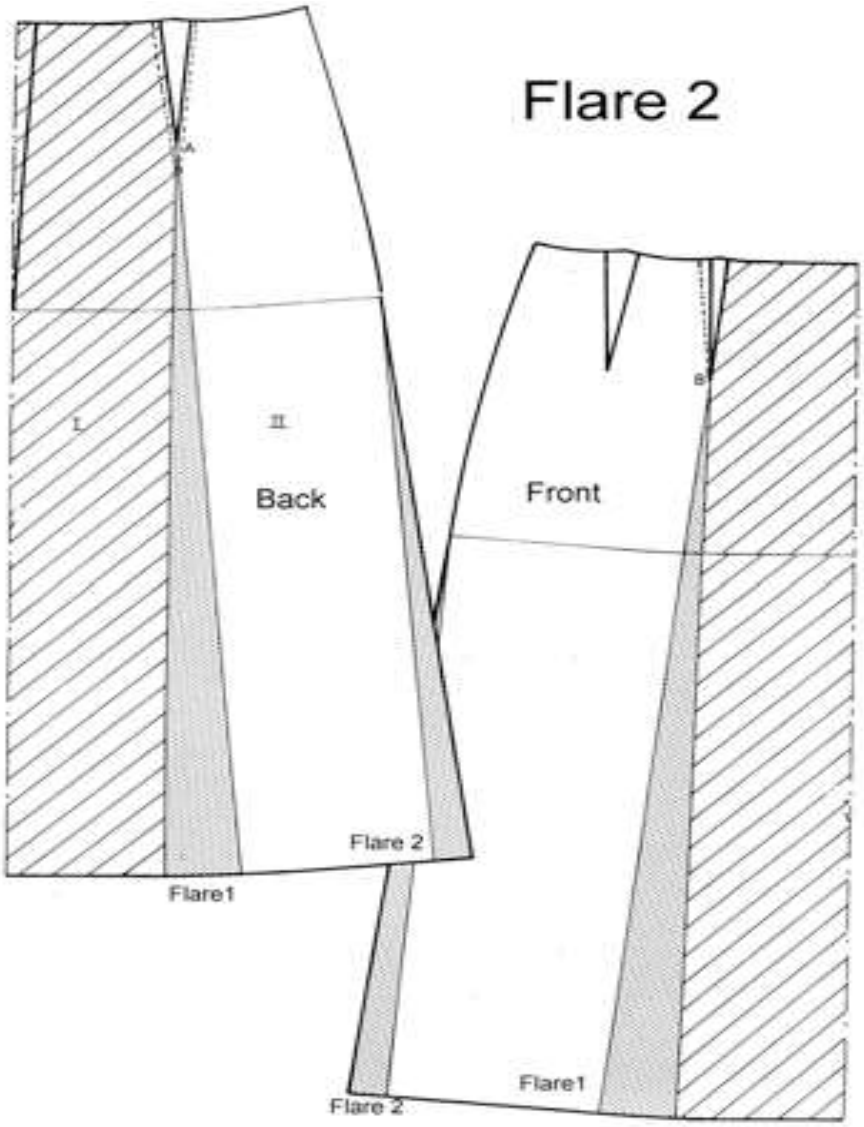


Fig___ Flare no. 2

Self check -5	Written test

Name: _____ **Date:** _____

Instructions:

Write all your answers in the provided answer sheet pages

Directions: Answer all the questions listed below.

Part- A

Fill in the blanks: (5 * 1= 5)

1. _____ and _____ are the most important and fundamental in fabricating leather garments
2. The top portion of the front pattern divided is called as _____
3. The length of the collar is equal to the _____ measurement of front & back patterns
4. The sleeve which extent up to neck line of the garment is called_____.
5. _____ is the component attached at the bottom of the sleeve to control the sleeve opening at the bottom

PART- B

True or False: (5 * 1 = 5)

1. The cost of leather garment depends upon pattern cutting, which determines the value of production.
2. Back yoke is at the top of the back pattern.
3. The front and back patterns are differentiated by seeing the neck line and arm hole.
4. Bust dart is located in the back pattern of the jacket.
5. During flaring of skirt pattern the dart value at the waist gets reduced

PART- C (5 * 1 = 5)

1. List any two aspects of garment pattern.
2. List any two types of sleeves
3. List any two types of collar
4. What is flaring of skirt pattern?
5. List any two differences between simple shirt sleeve and raglan sleeve.

Answer sheet

Score=
Rating=

Name:_____**Date:**_____

Test I. True or False

1. _____
2. _____
3. _____
4. _____
5. _____

Test II: Short Answer Questions

1. _____

_____

_____

_____

_____

2. _____

_____

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_____

_____

3. _____

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4. _____

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5. _____

LAP Test — 1	Practical Demonstration Test

Name: _____ **Date:** _____

Time started: _____ **Time finished:** _____

Directions: Answer all the questions listed below.

Task 1: Move dart in the bodice

Task 2: Make Collar Patterns

Task 3: Make Flare skirt pattern

Notes: All pattern information should be documented and achieved: