



# INTERMEDIATE APPARE PRODUCTION

## NTQF LEVEL II

# Learning guide #21

**Unit of Competence: Develop Pattern from a Block Using Basic Patternmaking Principles**

**Module Title: Developing Pattern from a Block Using Basic Patternmaking Principles**

**LG Code: IND IAP2MO 6 LO3-LG-21**

**TTLM Code: IND IAP2TTLM 06 19 2019**





**LO3: Apply basic patternmaking principles to develop patterns**



## Instruction Sheet

## Learning Guide 21

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

-  Apply basic pattern making principles
-  Document method formulas
-  Check pattern pieces for accuracy
-  label all pattern pieces

***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 –***

- develop Pattern applying basic patternmaking principles and in accordance with specifications
- Document *Methods and formulas* used.
- Check Pattern pieces for accuracy, including seam allowances, ease allowances, seam match, hems and functional openings.
- label All pattern pieces, including grain lines, notches, pattern information and cutting instructions



## **Learning Instructions:**

1. Read the specific objectives of this Learning Guide.
2. Follow the instructions described in number 1 to.7
3. Read the information written in the “Information Sheets 1” “Information Sheets 2” “Information Sheets 3” “Information Sheets 4”. Try to understand what are being discussed. Ask you teacher for assistance if you have hard time understanding them.
4. Accomplish the “Self-check 1” “Self-check 2” “Self-check 3” “Self-check 4” .
5. Ask from your teacher the key to correction (key answers) or you can request your teacher to correct your work. (You are to get the key answer only after you finished answering the “Self-check 1” “Self-check 2” “Self-check 3” “Self-check 4”).
6. If you earned a satisfactory evaluation you can proceed to Learning Guide #22  
However, if your rating is unsatisfactory, see your teacher for further instructions or go back to Learning Activity.
7. Submit your accomplished Self-check. This will form part of your training portfolio.



## Information Sheet-1

## Apply basic pattern making principles

### 3.1 Applying basic pattern making principles

#### Introduction

Pattern of a garment is the blue print on the basis of the fabric is cut. The patterns can be prepared using strong brown papers, news papers for rough drafts, strong white paper which is available in a variety of weights and widths, tracing paper or butter paper may be used to develop.

#### Pattern making

the basic procedure for apparel making is to design a pattern and put it into an identifiable form. The traditional method of pattern making includes creation of hard paper patterns.

The modern apparel making system has adopted the digitization of pattern making process.

These days many clothing firms provide the most modern and technical services for garment construction.

They can create fresh computerized patterns or make modifications to existing hard paper patterns or digitize the available data. These patterns can be made from their own samples or specifications provided by the apparel manufacturers. Most of these firms try to provide patterns that will sew properly without confusion in the production line.

A patternmaker typically makes a pattern from a flat sketch with measurements or a two dimensional fashion illustration. The basic pattern is the very foundation upon which



pattern making, fit and design are based. The basic pattern is the starting point for flat pattern designing.

## Methods of Pattern Making

Pattern making involves three methods-

- Drafting
- Draping
- Flat paper patternmaking

**Drafting:** It involves measurements derived from sizing systems or accurate measurements taken on a person, dress or body form. Measurements for chest, waist, hip and so on, and ease allowances are marked on paper and construction lines are drawn to complete the pattern. Drafting is used to create basic, foundation or design patterns.

**Draping:** It involves the draping of a two dimensional piece of fabric around a form, conforming to its shape, creating a three-dimensional fabric pattern. This muslin is transferred to paper to be used as a final pattern (Armstrong). Ease allowances for movement are added to make the garment comfortable to wear. Advantage of draping is that the designer can see the overall design effect of the finished garment on the body form before the garment piece is cut and sewn. However, it is more expensive and time consuming than flat pattern making.

**Flat Pattern Making:** It involves the development of a fitted basic pattern with comfort ease to fit a person or body form. A sloper is the starting point for flat pattern designing.

A basic pattern of a garment can be prepared by one of these two methods:

- By drafting
- By draping fabric on a model or person concerned

Drafting may be defined as a system of drawing patterns on paper with mechanical precision, on the basis of body measurements. The basic pattern developed on paper may be modified to develop patterns for varied styles. This is also called as flat pattern



designing. This is sometimes called as the third type of preparing patterns that is rather imprecise. The basic pattern is also referred to as slope, block, master or foundation pattern.

There are three ways of making a pattern

- 1) **The Foundation/ Block pattern**
- 2) **The Drape pattern**
- 3) **Commercial pattern**

### **The Foundation/ Block pattern**

A block pattern **is a foundation pattern constructed to fit an average figure**. It is made from the individual measurement. That means it is made by drafting from the measurements, which have been carefully taken from an individual or from a model. It is to be traced in another pattern paper for construction purpose.

### **The Drape pattern**

It is the placing of a fabric over the model's body of mannequin. It lets the fabric flow freely downward over the body's silhouette. This is the most expensive pattern as it utilizes more fabric. It is also known as the pattern that creates the original effect.

### **Commercial Pattern**

These are sold in department stores. They have a package of direction and contain the actual pattern pieces one will use to cut out fabric. They include a sheet of instructions. This sheet has both written directions and small drawings that explain what to do.

Understanding the different ways of making a pattern, as a tailor, we select the block pattern for each style or components of a garment.

For example, the block patterns of a basic blouse, skirt and trouser consists of seven parts:

- |                    |                     |
|--------------------|---------------------|
| 1) Front bodies,   | 5) The front skirt, |
| 2) Back bodies,    | 6) Front panel and  |
| 3) The sleeve,     | 7) Back panel.      |
| 4) The back skirt, |                     |



|                      |                             |
|----------------------|-----------------------------|
| <b>Self-Check -1</b> | <b>Multiple choice Test</b> |
|----------------------|-----------------------------|

**Directions: Answer all the questions listed below. Use the Answer sheet provided in the next page**

1. Which one of the following is way of pattern making(3 point)
  - a) Foundation/ Block pattern
  - b) Drape pattern
  - c) Commercial pattern
  - d) All
2. ....Is a foundation pattern constructed to fit an average figure (3 point)
  - a) Commercial pattern
  - b) The Drape pattern
  - c) Block pattern
3. One of the following is not methods of pattern making (3 point)
  - a) Drafting
  - b) Commercial pattern
  - c) Draping
  - d) Flat paper patternmaking
4. One of the following is not way of pattern making(3 point)
  - a) The Foundation/ Block pattern
  - b) Drape pattern
  - c) Commercial pattern
  - d) Flat paper patternmaking
  - e) non



**Note: Satisfactory rating – 6 points and above points**

**Unsatisfactory - below 6**

You can ask you teacher for the copy of the correct answers.

**Answer Sheet**

|               |
|---------------|
| Score = _____ |
| Rating: _____ |

Name: \_\_\_\_\_

Date: \_\_\_\_\_

1. \_\_\_\_\_
2. \_\_\_\_\_





## Information Sheet-2

## Documenting methods and formulas

### 3.2 Documenting methods and formulas

It includes the following contents

- 3.2.1 Deviations from standard patterns
- 3.2.2 Sources of pattern components
- 3.2.3 Pattern derivation methods and formulas
- 3.2.4 Block construction methods and formulas

In the course **Blouse and Dress** we will limit and focus on 16 needed measurements for the basic pattern (5 main measurements and 11 aid measurements):

#### Main Measurements:

- Model length
- Bust girth
- Waist girth
- Hip girth
- Sleeve length

#### Aid Measurements:

- Back height/Armhole depth
- Back length (back neck to waist)
- Hip depth (waist to hip)
- Neck circumference
- Armhole/ Arm hole circumference
- Shoulder/ Shoulder width
- Front Length/ Front waist length
- Chest width/ Front chest width
- Back chest width
- Bust depth
- Bust point distance

#### 1. Skirt

In the course **Skirt** we will limit and focus on the 3 main body measurements needed for skirt pattern-especially for the basic pattern:

- Waist,
- Hip,
- Waist to hip and
- Skirt length.



❖ Basic blouse/shirt

For the purpose of understanding, the following definitions shall apply:

- 1) **Chest girth:** twice the distance across the shirt measured below the bottom of the armholes when the shirt is buttoned.
- 2) **Shirt length**
  - 2.1) **back length:** the distance from the centre of the base of the collar to the bottom of the shirt.
  - 2.2) **front length:** the distance from the neck point (the point where the yoke meets the collar) to the bottom of the shirt.
- 3) **Sleeve length:** the distance from the shoulder seam to the sleeve end.

**4, Yoke length:** the distance between the two shoulder seams measured along the centre of the yoke.

1.2.1 Deviations from standard patterns

# Basic Pattern

Specification

Unit: cm

| Position | Back length | Bust | Neck | Sleeve length |
|----------|-------------|------|------|---------------|
| Size     | 38          | 84   | 38   | 50.5          |





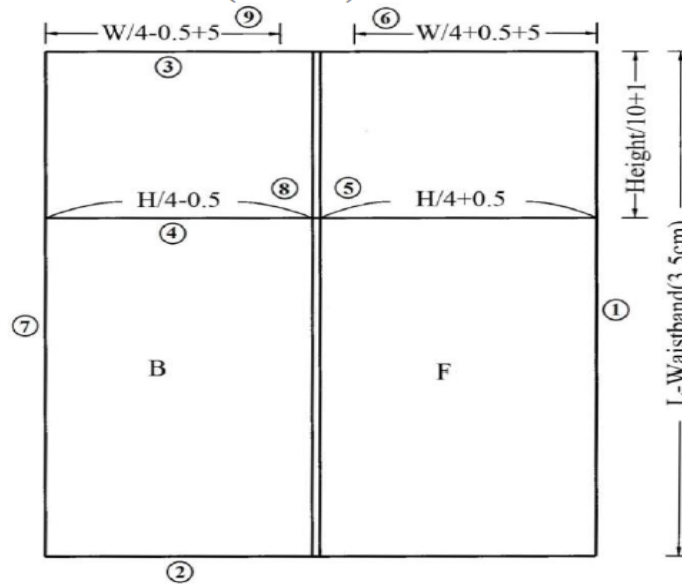
## Back

Extend the front hem line, waist line and the hip line.

(7) Center back line: center front line intersects hem line vertically.

(8) Side seam (back hip size): Hip/4-0.5cm from the center back line to the side seam line.

(9) Back waist size:  $W/4-0.5\text{cm}+5\text{cm}$  (for darts).



(10) 1cm down from the back waist line on the center back line.

(11) Construct two darts on front waistline: divide the front waist line into three parts, mark points of center dart line, width 2.5cm, length 9cm.

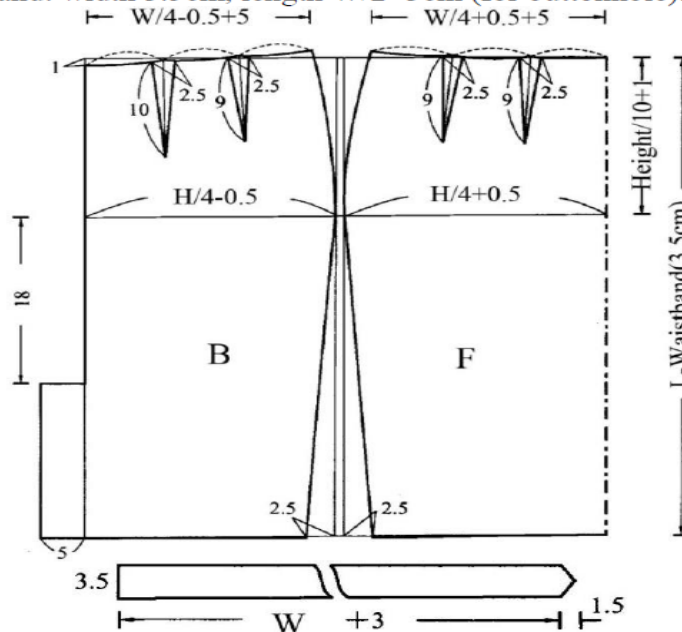
(12) Construct two darts on back waistline: divide the back waist line three parts, mark points of center dart line, width 2.5 cm , length 9cm and 10cm .

## 2) Draw outlines of the front and the back piece

(1) Draw the center front fold line, the waistline (with a slight curve), the side seam (curving outwards), the center back line and the hemline (2cm inward on the hemline).

(2) Design the vent position on the centre back line: 18cm down from the hip line to vent line.

(3) Draw the waistband: width 3.5cm, length  $W/2+3\text{cm}$  (for buttonhole).

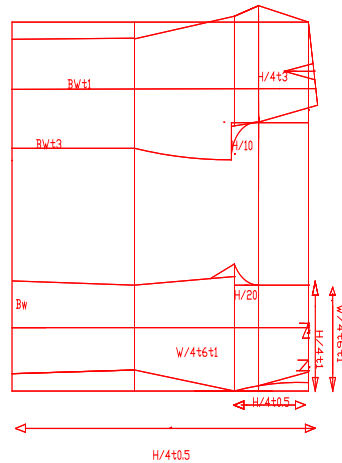






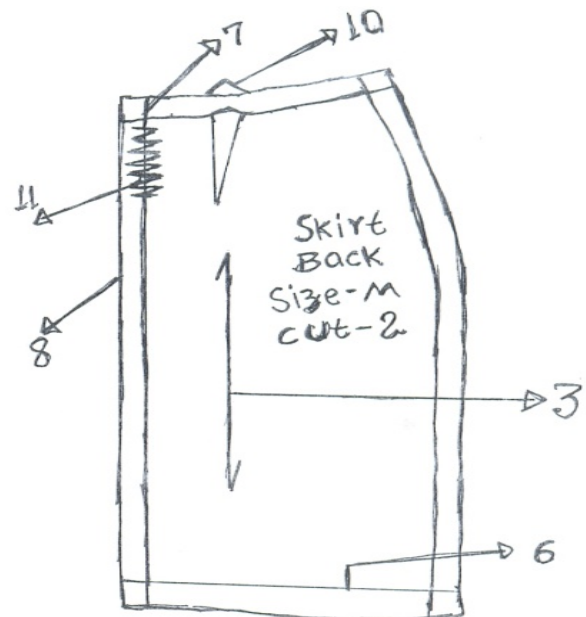
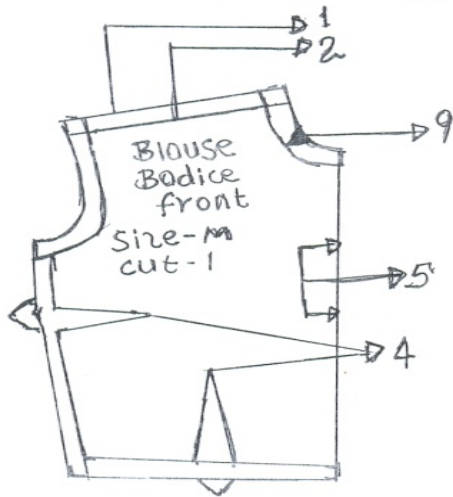
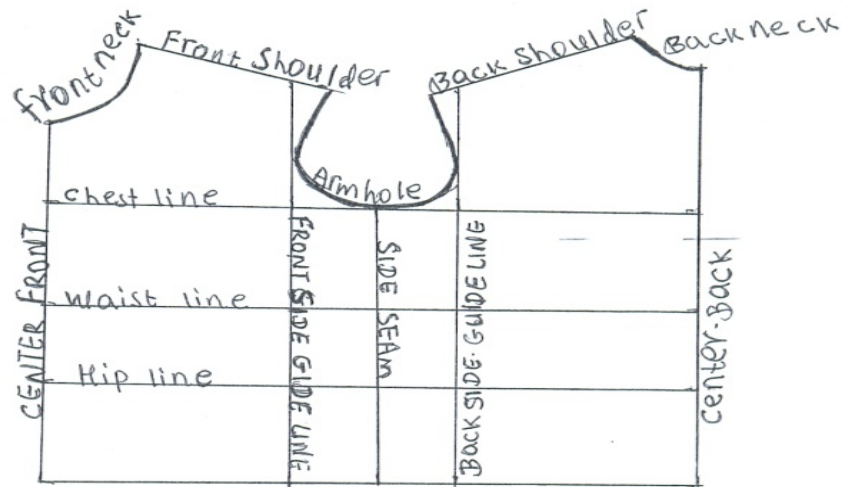
Hip (H) 98cm

Bottom width=22cm

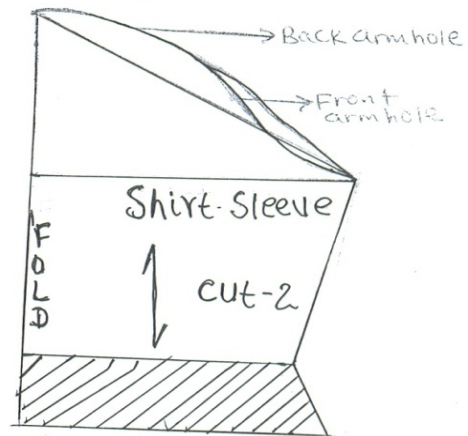
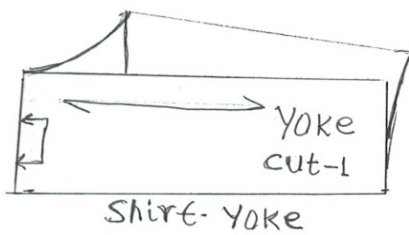
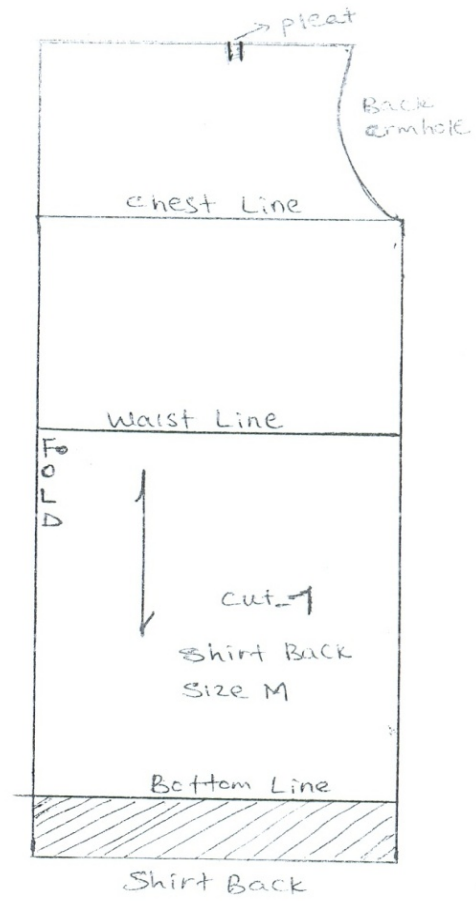
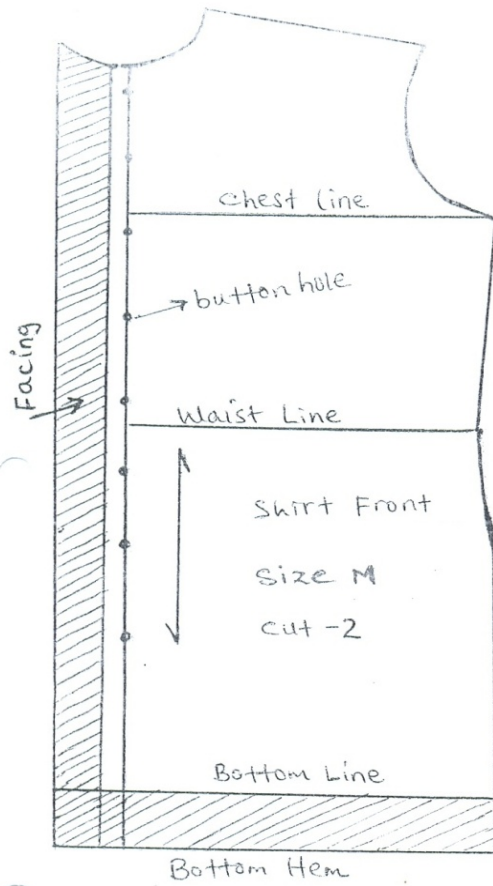


- Seam allowance is an extra part added on the final pattern for proper stitch of the joining parts with sufficient allowance and proper joining of part
- Seams :are formed when two or more pieces of fabric are held together by stitches

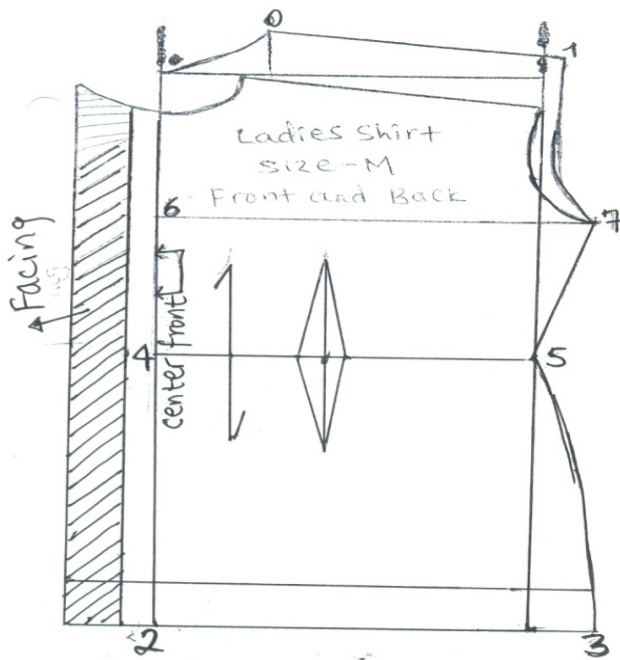
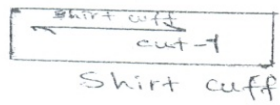
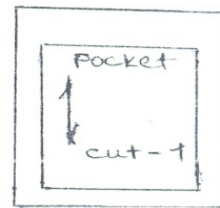
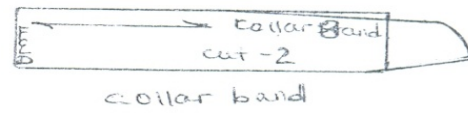
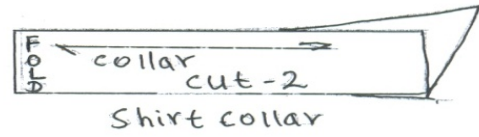
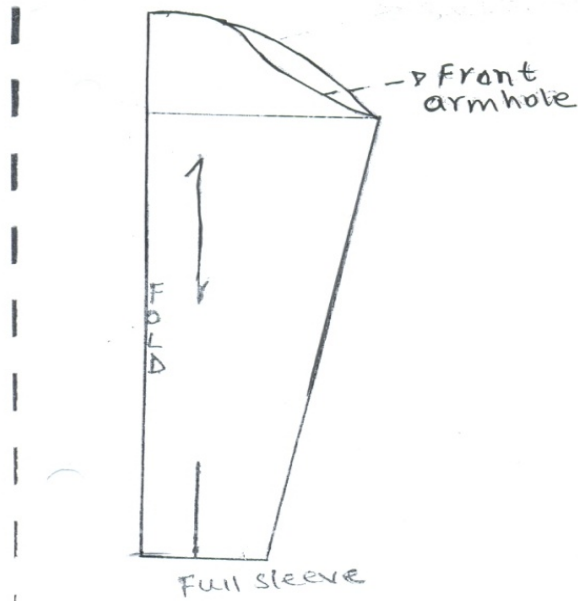
### 3.2.5 Sources of pattern components



- 1- cutting-Line
- 2- Seam-Line
- 3- Grain-Line
- 4- Dart
- 5- Fold-Line
- 6- Hem-Line
- 7- center back Seam-Line
- 8- center-back Line.
- 9- Inward notch
- 10- outward notch
11. zipper position







Front cut-2  
 Back  
 0-1, 6-7, 4-5, 2-3  
 cut 1 with fold  
 no dart in the back

Front & Back



## Self-Check -2

## Multiple choice Test

**Directions:** Answer all the questions listed below. Use the Answer sheet provided in the next page

1. One of the following is not for basic pattern main measurements **(3 points)**
  - a) Model length
  - b) Bust girth
  - c) **Back height/Armhole depth**
  - d) Waist girth
  - e) Hip girth
  - f) Sleeve length
2. One of the following is no main basic skirt measurement **(3 points)**
  - a) Waist
  - b) Hip
  - c) Waist to hip and
  - d) Skirt length
  - e) **Chest girth**



**Note: Satisfactory rating - 3 points**

**Unsatisfactory - below 3 points**

You can ask your teacher for the copy of the correct answers.

### Answer Sheet

Score = \_\_\_\_\_

Rating: \_\_\_\_\_

Name: \_\_\_\_\_

Date: \_\_\_\_\_

3. \_\_\_\_\_  
\_\_\_\_\_
4. \_\_\_\_\_  
\_\_\_\_\_
5. \_\_\_\_\_



## Information Sheet-3

## Checking pattern pieces

### 3.3 Checking pattern pieces

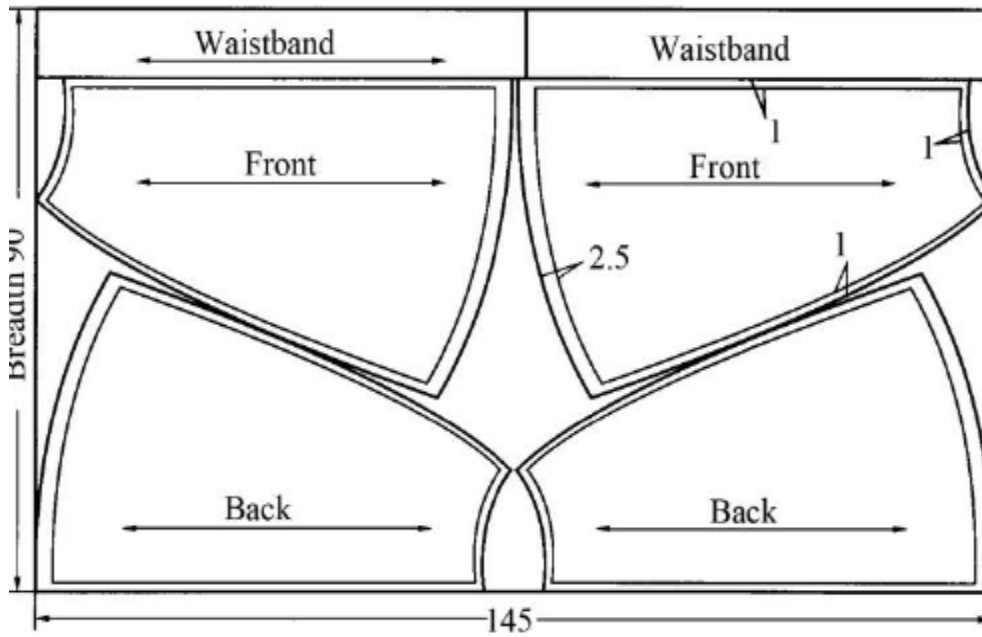
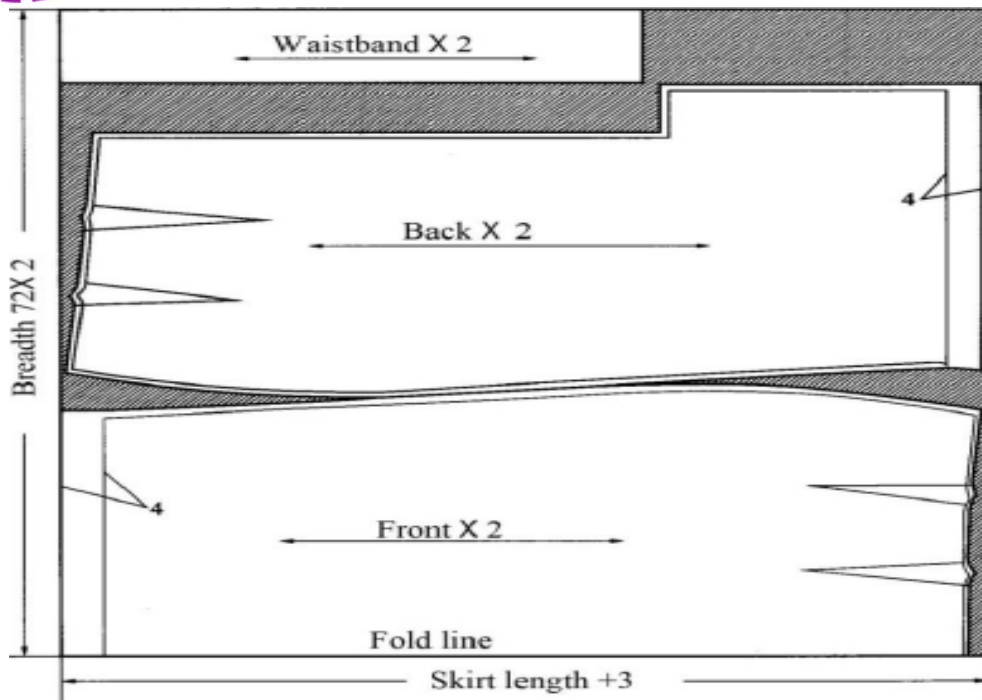
First, the basics. When checking a pattern the first thing is completeness. YOU don't know if the designer read the post Sending patterns off for correction but she probably did judging from the results. Namely, I had a hard copy (oak tag) pattern, a sewn sample and a cutter's must. The only information I didn't get was seam allowance but I'll qualify that by saying I could derive the information from the sample and the pattern design. In other words, if you do generally nice work with demonstrable competency, others can come behind you and make sense of what's missing derivatively. If your work is all over the map, not following a set pattern of standard practices, people will have to come and bug you to figure it out.

Before one even begins to lay seam lines together to check pattern accuracy, a preliminary review of form and industry standard conventions is in order. The first things to check are:

1. Medium: this designer used standard oak tag paper. Tracings on alphanumeric paper are acceptable but oak tag is always optimal.
2. Color coding: all of the pieces were color coded correctly.
3. Style numbers: each piece was clearly labeled with a four digit style number. And the numbers were good, nothing goofy about them. :) (see parts one, two and three)
4. Information Block. The pattern must have a block of information with specific information. All handwritten information must be legible, neat block lettering is preferred with as few words and letters as is possible. Specifically, the information block includes:



- Piece ID: Each piece was given a unique piece name.
  - Fabrication: This designer indicated all shell, lining and canvas pieces correctly.
  - Cut: The number of units to cut from each piece was included.
  - Size: The size is needed. Our friend did forget to mark the size. She had told me the size by phone but do remember to always write that down.
  - Directional: If it is important that the piece be cut in only one way, this must be marked as R.S.U. or Face Up. If this is due to nap, you must write “Nap” and a short arrow indicating the grain of the pile. This was omitted in this sample pattern.
5. Pattern or Direction Card: A pattern card or a direction card is a part of the pattern (read from the links above to see what one looks like). The designer included the cutter’s must but didn’t have one of these. This card can serve the function of a tracking device; relating the history of the style. You keep notes on the back. Anytime you fit it, you transcribe your notes there. Anytime you change the pattern, you write down what you did to it and when. It’s a style diary. You can buy these cards from Adam’s Press or Ahearn’s. You’ll have to order by phone with Adam’s Press (213-627-2151). Other suppliers sell these cards too.
6. Grain line: Not all pieces but most of them, need a grain line. All of these pieces had grain lines.





### **Self-Check -3**

### **Multiple choice Test**

**Directions:** Answer all the questions listed below. Use the Answer sheet provided in the next page

1. One of the following is not skirt pattern pieces ( **2 point**)
  - a) Waist band
  - b) Back
  - c) Front
  - d) Sleeve
  
2. All are shirt pattern pieces except one( **2 point**)
  - a) Front
  - b) Welt pocket
  - c) Back
  - d) Sleeve
  - e) Cuff
  - f) Collar



**Note: Satisfactory rating – 2 points and above      Unsatisfactory - below 2 points**

You can ask your teacher for the copy of the correct answers.

### Answer Sheet

Score = \_\_\_\_\_

Rating: \_\_\_\_\_

Name: \_\_\_\_\_

Date: \_\_\_\_\_

1. \_\_\_\_\_  
\_\_\_\_\_
2. \_\_\_\_\_  
\_\_\_\_\_
3. \_\_\_\_\_





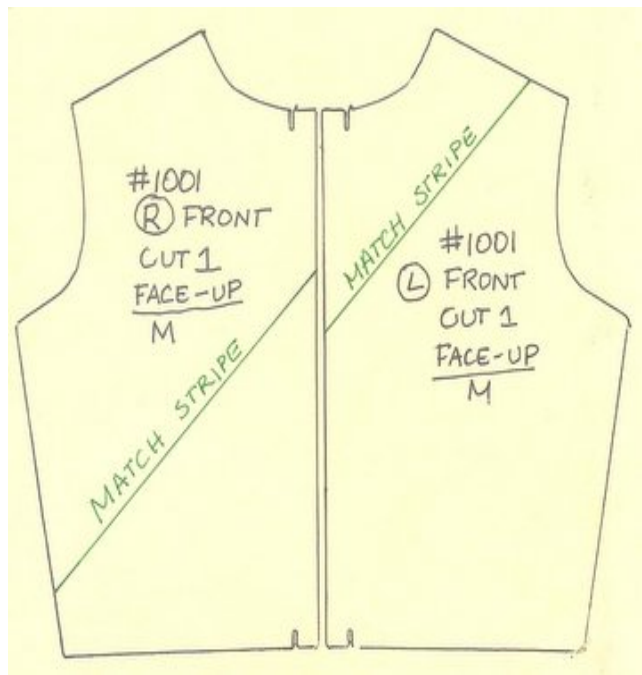
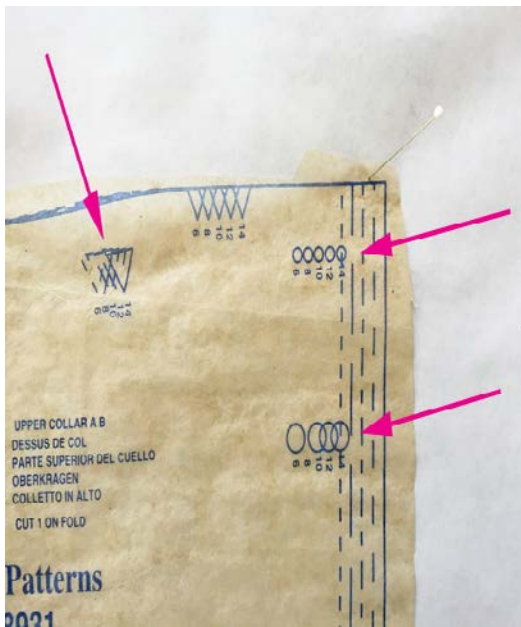
|                            |  |
|----------------------------|--|
| <b>Information Sheet-4</b> | <b>Labeling all pattern pieces information</b> |
|----------------------------|--|

### 3.4 Labeling all pattern pieces information

**Pattern pieces** are crucial in the development of a garment. **All patterns** need to be clearly and precisely **labeled** so that the right **pattern** can be used to make markers. Notice that **all information** is **labeled** clearly, facing the right way

Have a look at the labeled pattern below. Notice that all information is labeled clearly, facing the right way.

Move your mouse over the pattern, particularly the labeled sections, to find out the information that needs to be included.





|                      |                             |
|----------------------|-----------------------------|
| <b>Self-Check -4</b> | <b>Multiple choice Test</b> |
|----------------------|-----------------------------|

**Directions:** Answer all the questions listed below. Use the Answer sheet provided in the next page

1. One of the following is needed on the pattern information (3 point)  
a) Grain line b) part name c) style number d) size e) all
2. One of the following is not finale pattern labeled(3 point)  
a) Cut no b) size c) notch d) bundle no

**Note:** Satisfactory rating – 3 points and above      Unsatisfactory - below 3 points

You can ask you teacher for the copy of the correct answers.

**Answer Sheet**

Score = \_\_\_\_\_

Rating: \_\_\_\_\_

Name: \_\_\_\_\_

Date: \_\_\_\_\_

1. \_\_\_\_\_

2. \_\_\_\_\_



## Operation sheet -1

## How to make basic skirt,

### HOW TO MAKE BASIC SKIRT

#### STEPS 1

#### FRONT

#### VERTICAL LINES

1. Basic lines

2. Skirt length

Length of skirt

3. Hip line

Hip /4

#### HORIZONTAL LINES

4. Center front line

5. Width of skirt (Back and front)

H/2

6. Front waist line

$W/4 + 1\text{cm} + \text{dart}[2]$

7. Back waist line

$W/4 - 1\text{cm} + \text{dart}$



Waist girth: 66cm (without ease)

Somatotype: 'A'

Hip girth: 90cm (without ease)

2) Measurements required for structure drawing of the basic skirt

Waist girth: 68cm (with 2cm ease)

Hip girth: 94cm (with 4cm ease)

Skirt length: 58cm (affected by fashion)

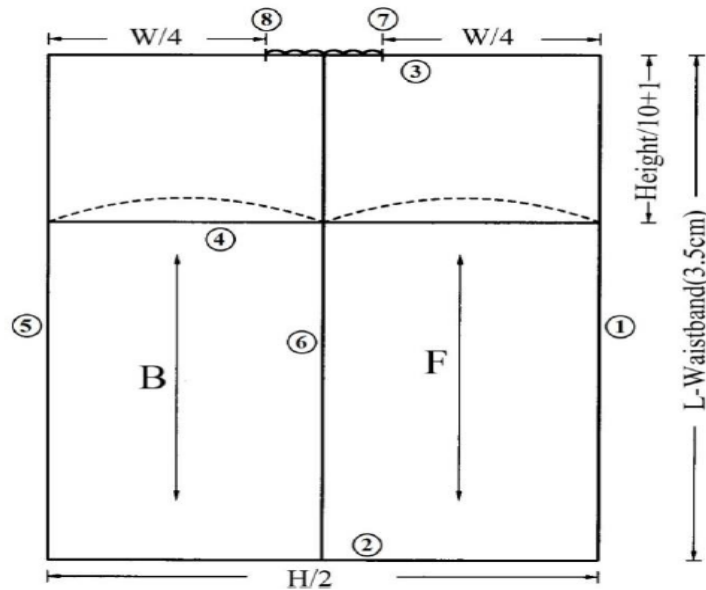
Unit: cm

| Position | Skirt length (L) | Waist girth(W) | Hip girth(H) |
|----------|------------------|----------------|--------------|
| Size     | 58               | 68             | 94           |

2. Sequence of operation

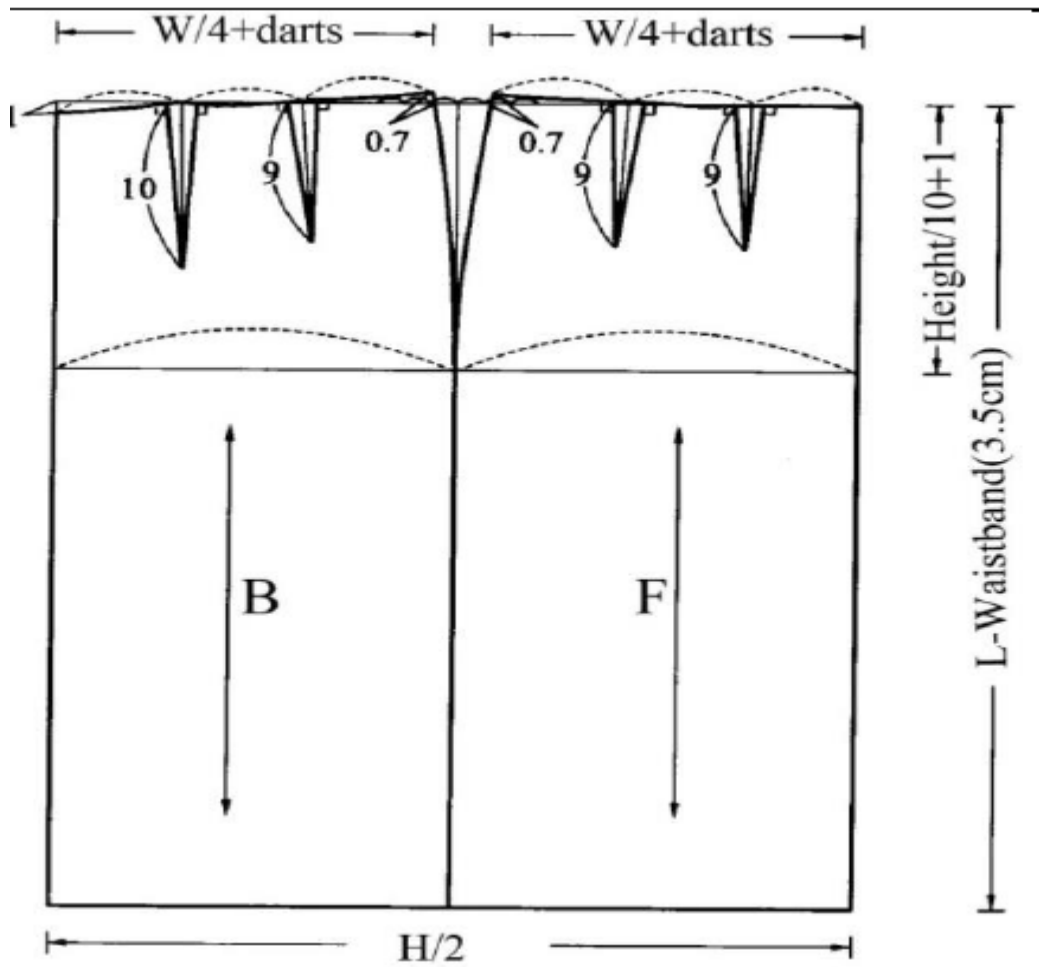
1) Draw basic lines of the skirt

- (1) Center front line:
- (2) Hem line: hem line intersects center front line vertically.
- (3) Waist line: skirt length-3.5cm (for waistband width), measure from hem line to waist line.
- (4) Hip line: Height/10+1cm, measure from waist line to hip line.
- (5) Center back line: measure from the center front line to center back line, equals half of the hip girth (H/2).
- (6) Side seam: half the measurement from the center front line to the center back line.
- (7) Front waist size: W/4.
- (8) Back waist size: W/4.



2) Draw outlines of the skirt

- (1) Front waist size: W/4+ darts.
- (2) Construct two darts on the front waistline: 0.7cm up from side seam on the front waistline. Divide the front waist measurement into three parts, mark points of the center dart line, width 2cm, length 9cm.
- (3) Back waist size: W/4+ darts.
- (4) Construct two darts on the back waistline: 0.7cm up from side seam on the back waistline. divide the back waist measurement into three parts, mark points of the center dart line, width 2 cm, length 9cm and 10cm.
- (5) Measure 1cm down from the waist line on the center back line.
- (6) Draw the center front line, the waistline (with a slight curve), the side seam (with curve), the center back line and the hemline.

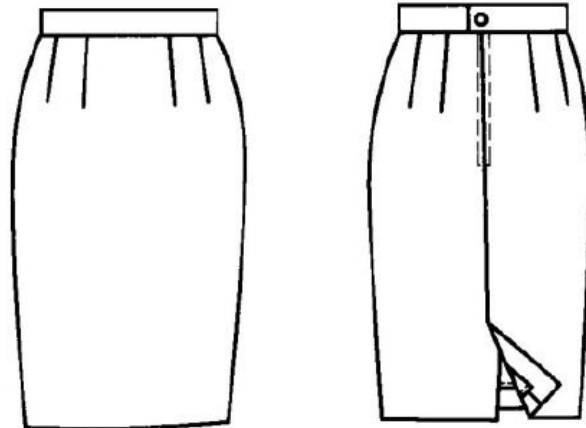




### 1.1.3 Tailored skirt

#### 1. Style description

Install waist skirt, four darts on the front and back pieces, vent at the center back line, and the zipper on the center back line.



#### 2. Design specifications

1) Size selection: 160/66A

So, Height: 160cm

Waist girth: 66cm (without ease)

Somatotype: 'A'

Hip girth: 90cm (without ease)

2) Measurements required for structure drawing of the tailored skirt

Waist girth: 68cm (with 2cm ease)

Hip girth: 94cm (with 4cm ease)

Skirt Length: 58cm (affected by fashion)

Unit: cm

| Position | Skirt length (L) | Waist girth(W) | Hip girth(H) |
|----------|------------------|----------------|--------------|
| Size     | 58               | 68             | 94           |

#### 3. Sequence of operation

##### 1) Draw basic lines of the front and back piece

###### Front

(1) Center front line (fold line):

(2) Hem line: hem line intersects center front line vertically.

(3) Waist line: skirt length-3.5cm (for waistband width) from the hem line to the waist line.

(4) Hip line: Height/10+1cm from the waist line to the hip line.

(5) Side seam (front hip size):  $H/4 + 0.5$  cm, measure from the center front line to side seam.

(6) Front waist size:  $W/4 + 0.5\text{cm} + 5\text{cm}$  (for darts).



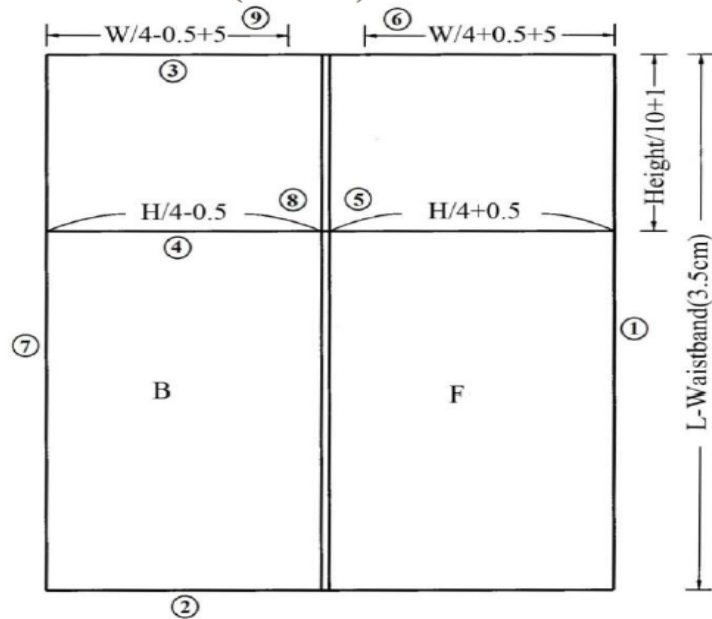
## Back

Extend the front hem line, waist line and the hip line.

(7) Center back line: center front line intersects hem line vertically.

(8) Side seam (back hip size): Hip/4-0.5cm from the center back line to the side seam line.

(9) Back waist size:  $W/4-0.5\text{cm}+5\text{cm}$  (for darts).



(10) 1cm down from the back waist line on the center back line.

(11) Construct two darts on front waistline: divide the front waist line into three parts, mark points of center dart line, width 2.5cm, length 9cm.

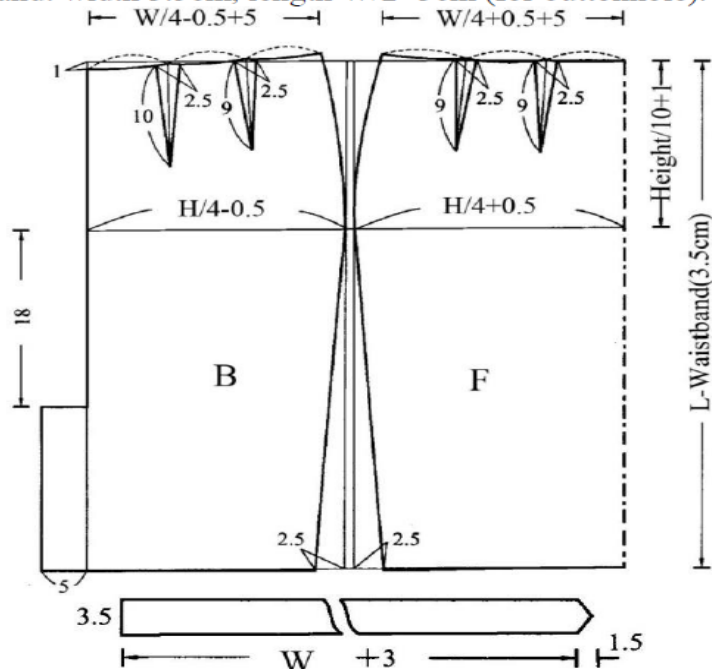
(12) Construct two darts on back waistline: divide the back waist line three parts, mark points of center dart line, width 2.5 cm , length 9cm and 10cm .

## 2) Draw outlines of the front and the back piece

(1) Draw the center front fold line, the waistline (with a slight curve), the side seam (curving outwards), the center back line and the hemline (2cm inward on the hemline).

(2) Design the vent position on the centre back line: 18cm down from the hip line to vent line.

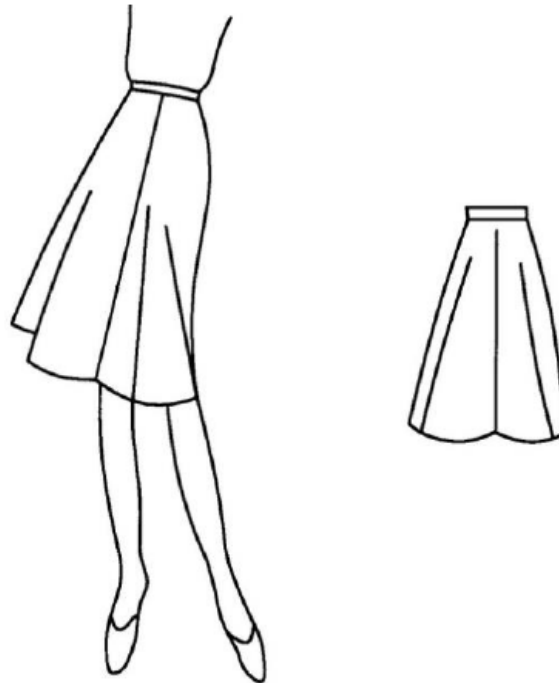
(3) Draw the waistband: width 3.5cm, length  $W/2+3\text{cm}$  (for buttonhole).





### 1.1.5 Four-gored skirt

#### 1.Style:



#### 2. Design specifications

1) Size selection: 160/66A

So, Height: 160cm

Waist girth: 66cm (without ease)

Somatotype: 'A'

Hip girth: 90cm (without ease)

2) Measurements required for structure drawing of the four-gored skirt

Waist girth: 68cm (with 2cm ease)

Hip girth: 94cm (with 4cm ease)

Skirt length: 64cm (affected by fashion)

Unit: cm

| Position | Skirt length (L) | Waist girth(W) | Hip girth(H) |
|----------|------------------|----------------|--------------|
| Size     | 64               | 68             | 94           |

#### 3. Sequence of operation

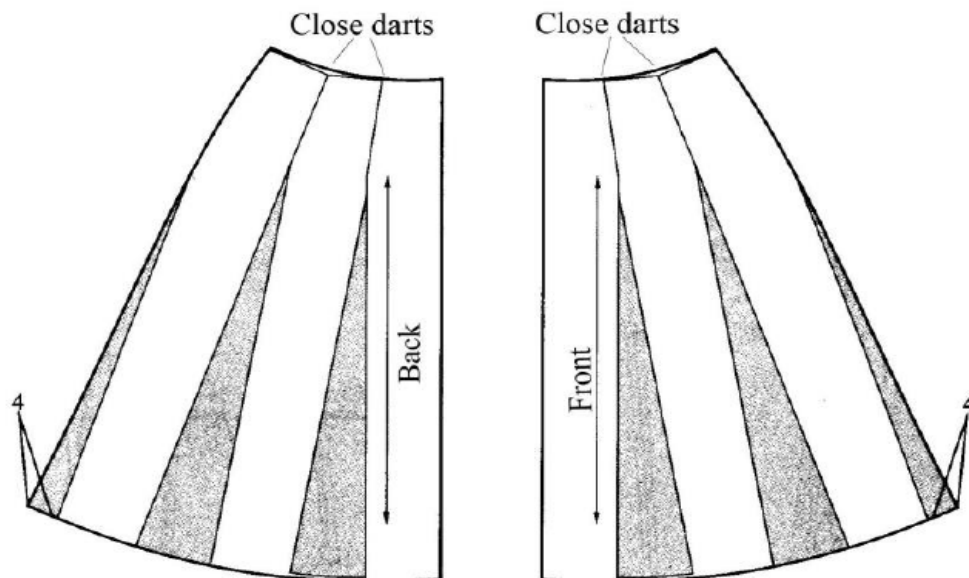
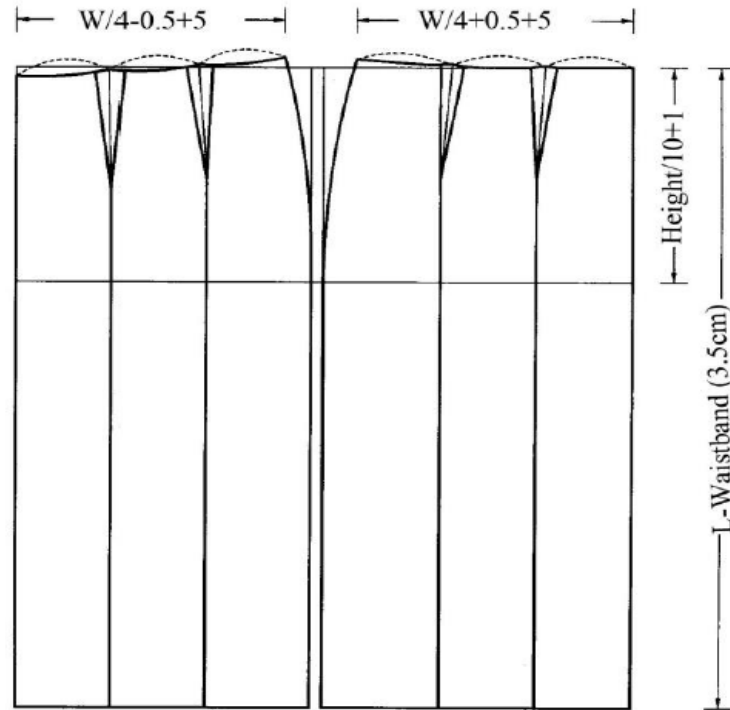
1) Structure drawing of basic skirt

2) Draw outlines of the front and the back piece





- (1) Draw vertical lines to hem from the original darts, cut out the pattern and cut up vertical lines. Close up darts.
- (2) Place on a new piece of paper, trace round new outlines, make sure the flare openings a hem equal, and add 4cm flare to hem on the side seam.
- (3) Draw the waistline with curve, the side seam, and the hemline with curve.
- (4) Waistband:



### 3. Pattern cutting and lay-planning of the four-gored skirt



|                           |                                       |
|---------------------------|---------------------------------------|
| <b>Operation sheet -2</b> | <b>How to make basic womem/shirt,</b> |
|---------------------------|---------------------------------------|

**3.1.2 Basic type of women's shirt**

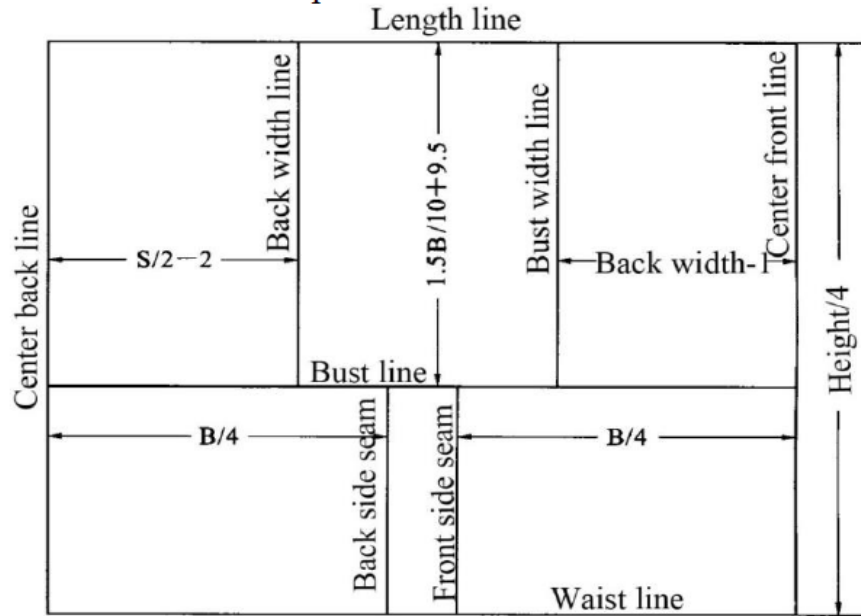
**1. Structure drawing of the basic type**

1) Specification (example)

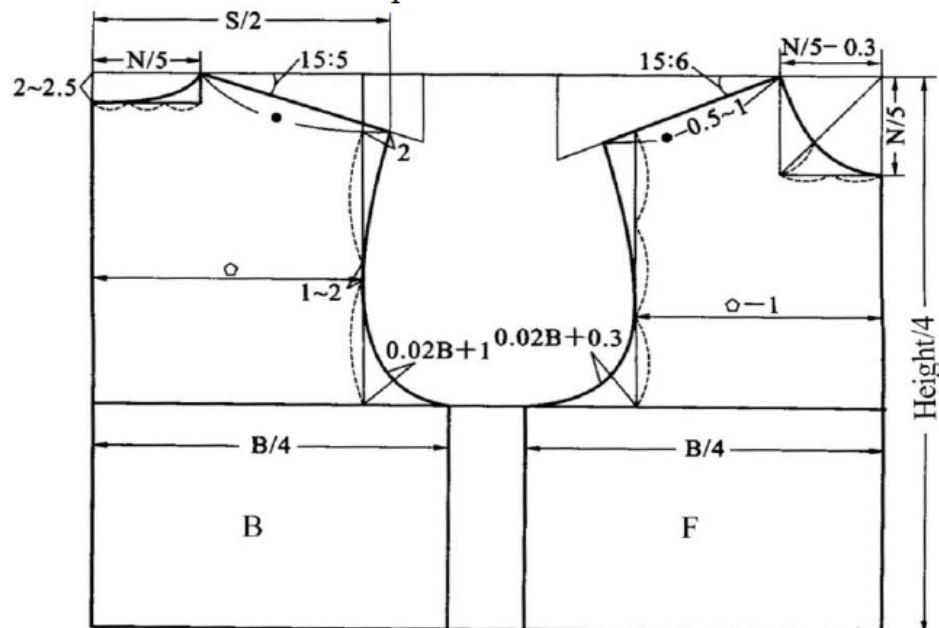
Unit: cm

| Position | Bust girth (B) | Shoulder width (S) | Neck size (N) |
|----------|----------------|--------------------|---------------|
| Size     | 88             | 37                 | 36            |

2) Basic lines of the front and back piece



3) Basic outlines of the front and back piece





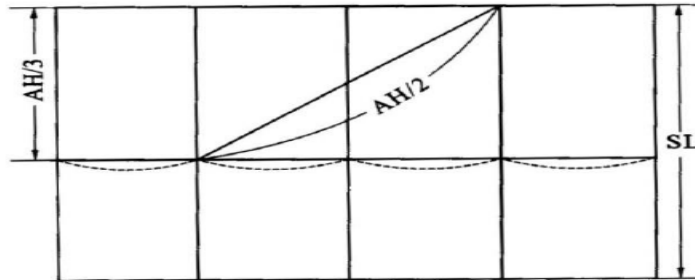
4) Basic type of one-piece sleeve

(1) Specification (for example)

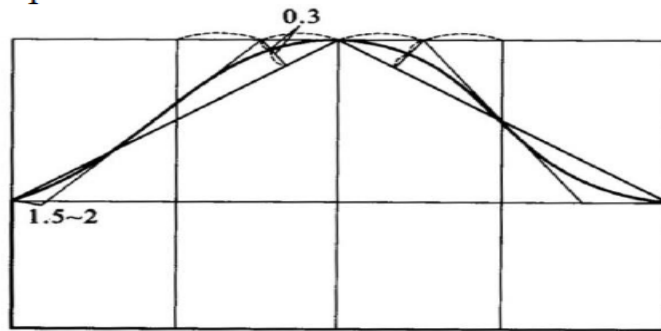
Unit: cm

| Position | Bust girth (B) | Sleeve length(SL) | Armhole size(AH) |
|----------|----------------|-------------------|------------------|
| Size     | 96             | 25                | 48               |

(2) Basic lines of one-piece sleeve



(3) Basic outlines of one-piece sleeve

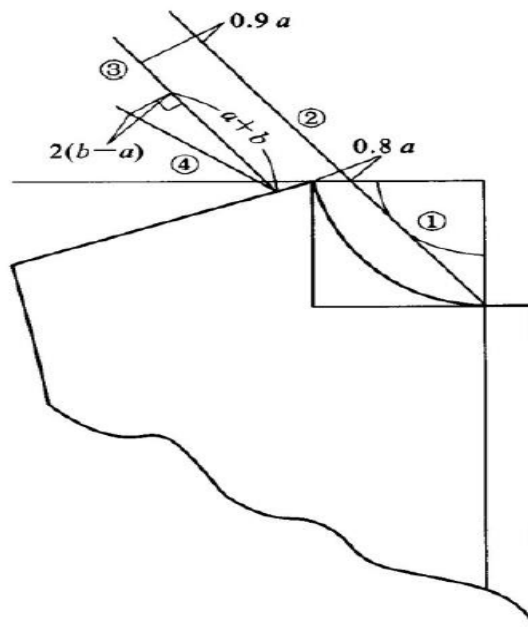


5) Basic type of shirt collar

(1) Basic lines of the collar

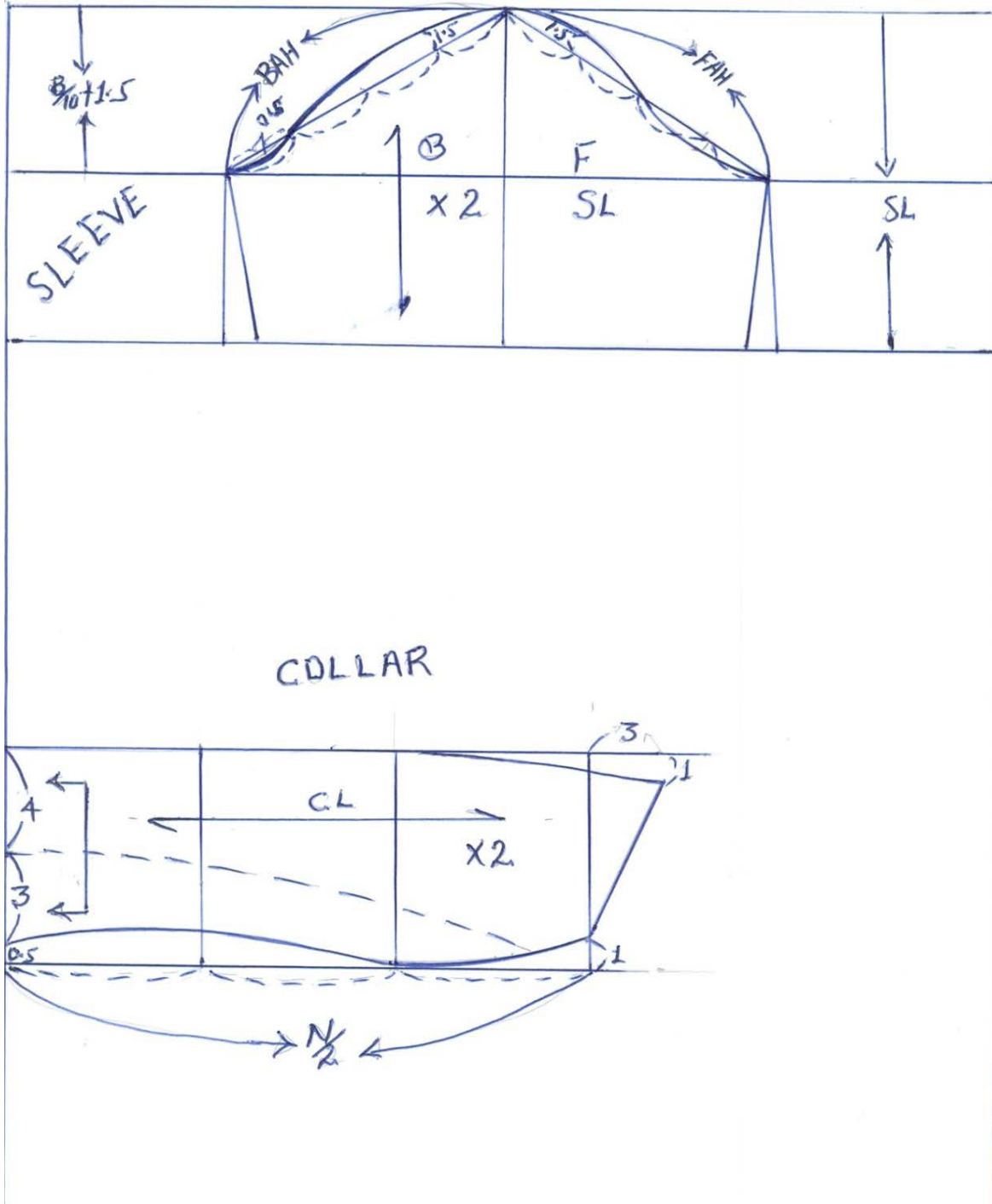
Collar stand: a

Rever collar: b





|                       |                 |               |          |            |           |                 |
|-----------------------|-----------------|---------------|----------|------------|-----------|-----------------|
| COMPANY NAME & LOGO   |                 | PRODUCT NAME  |          | STYLE CODE | SIZE      | DATE            |
|                       |                 | WOMEN'S SHIRT |          | TE002      | M         |                 |
| MEASUREMENT UNIT:- CM |                 |               |          |            |           |                 |
| SHIRT LENGTH          | BUST            | WAIST         | SHOULDER | B LENGTH   | SL LENGTH | NECK CUFF WIDTH |
| 70                    | 100             |               | 42       | 40         | 22        | 38              |
| GUIDE LINES           |                 |               |          |            |           |                 |
| BUTTON                | TYPES OF FABRIC | ZIP           | SPI      | NAME       |           |                 |
| 5                     |                 |               | 10       |            |           |                 |

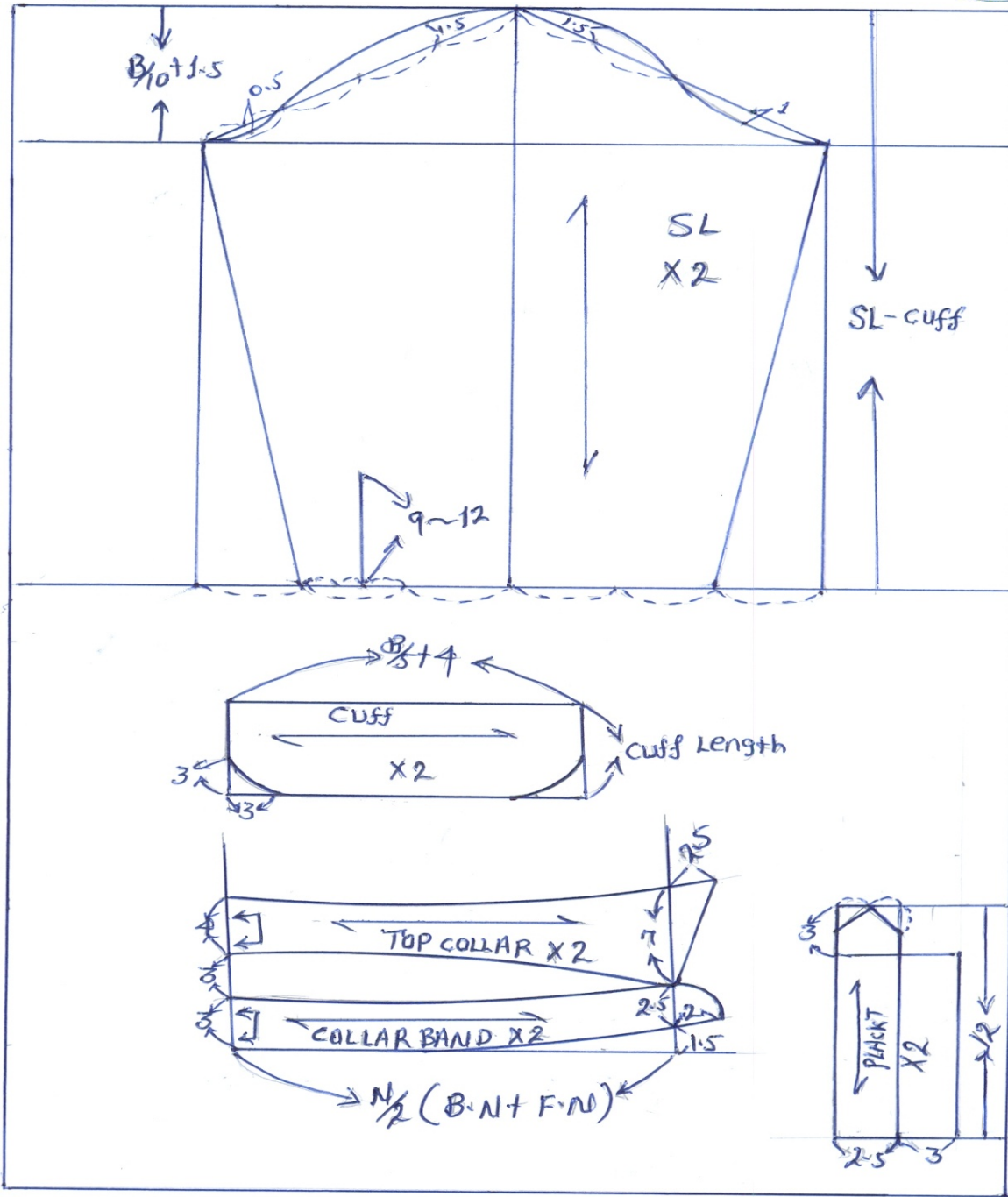




Operation sheet -3

HOW TO MAKE BASIC MEN SHIRT

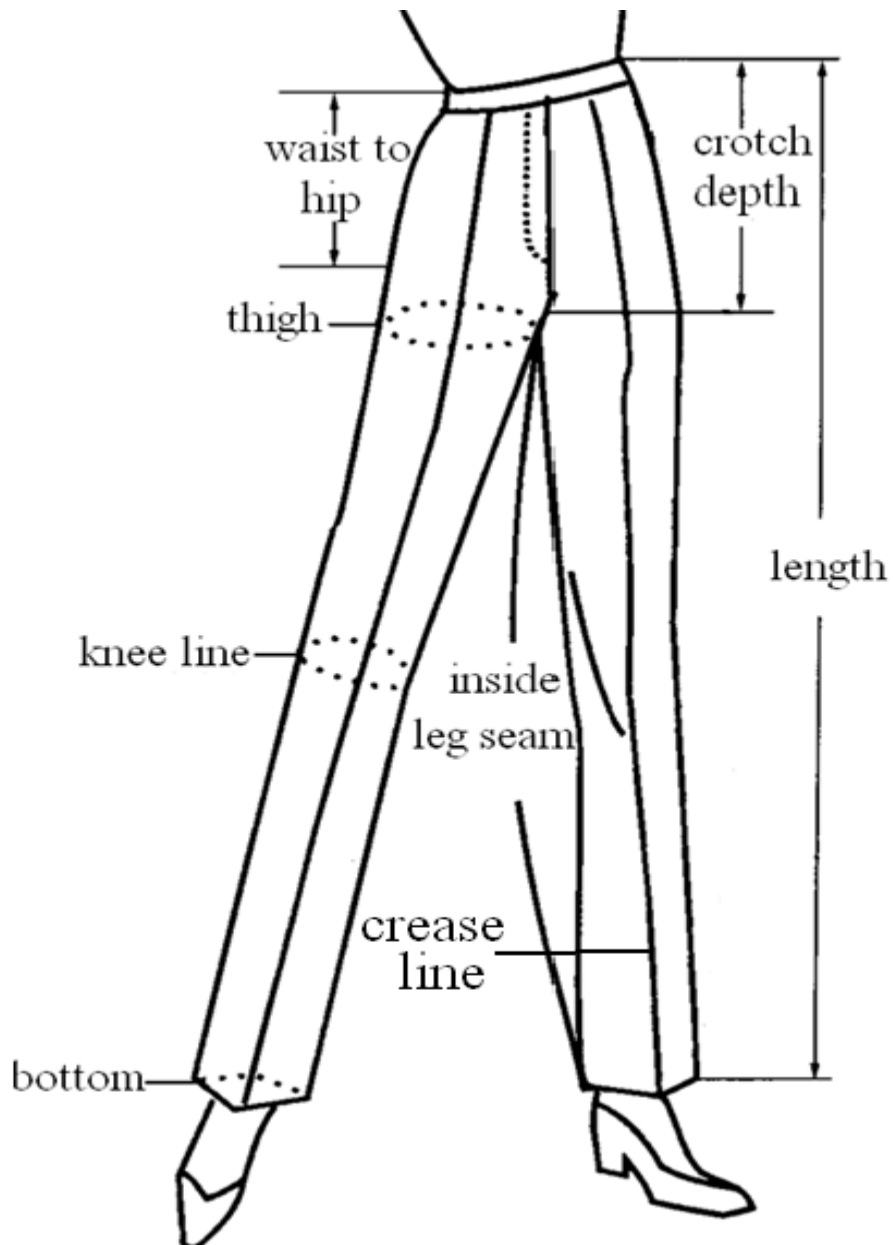
|                     |                 |              |            |      |           |    |               |               |               |
|---------------------|-----------------|--------------|------------|------|-----------|----|---------------|---------------|---------------|
| COMPANY NAME & LOGO |                 | PRODUCT NAME | STYLE CODE | SIZE | DATE      |    |               |               |               |
|                     |                 | MEN'S SHIRT  | TE003      | M    |           |    |               |               |               |
| MEASUREMENT         |                 |              |            |      | UNIT:- Cm |    |               |               |               |
| SH/L                | B               | W            | SH         | B/L  | SL/L      | N  | Yoke<br>depth | Cuff<br>width | Cuff<br>depth |
| 70                  | 108             |              | 45         |      | 55        | 40 | 6             |               | 6             |
| GUIDELINES          |                 |              |            |      |           |    |               |               |               |
| BUTTON              | TYPES OF FABRIC | ZIP          | SPI        | NAME |           |    |               |               |               |
| 7                   |                 |              | 10         |      |           |    |               |               |               |





**Operation sheet -4**

**HOW TO MAKE BASIC women's trouser**







## 2) Measurements required for structure drawing of the trousers

Waist girth: 68cm (with 2cm ease)

Hip girth: 98cm (with 8cm ease)

Unit: cm

| Positions | Trousers length (L) | Waist girth(W) | Hip girth(H) | Crotch depth | Trousers bottom width |
|-----------|---------------------|----------------|--------------|--------------|-----------------------|
| Size      | 102                 | 68             | 98           | 29           | 22                    |

## 3. Sequence of operation

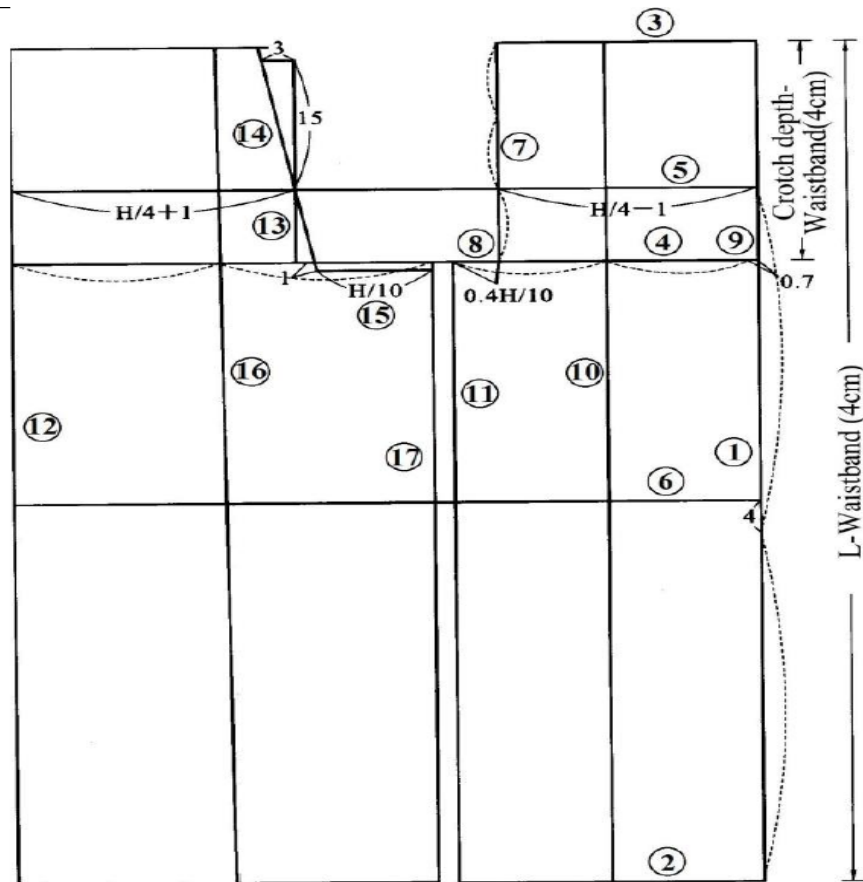
### 1) Draw framework of the front and the back piece

#### Front

- (1) Basic front side seam line:
- (2) Bottom line:
- (3) Length line (waist line): trousers length- waistband width (4cm).
- (4) Crotch depth line (thigh line): crotch depth- waistband width (4cm).
- (5) Hip line: one third the measurement from the waist line to the crotch depth line.
- (6) Knee line: one second the measurement from the hip line to the bottom line, and 4cm up.
- (7) Front crotch line:  $H/4-1\text{cm}$
- (8) Front crotch width line:  $0.4H/10$
- (9) Front side seam point: 0.7cm inward from the side seam.
- (10) Crease line:  $[0.4H/10+ (H/4-1\text{cm})-0.7\text{cm}]$  divided by 2.
- (11) Basic inseam line:

#### Back

- Extend the bottom line, waist line, hip line, crotch depth line and the knee line.
- (12) Basic side seam line:
  - (13) Hip size:  $H/4+1\text{cm}$ :
  - (14) Back crotch line: 15:3.
  - (15) Back crotch width line: first 1cm down from the front crotch depth line, then measure  $H/10$ .
  - (16) Back crease line: half the measurement from the side seam to inseam line.
  - (17) Basic inseam line.



## 2) Draw outlines of the trousers

- (1) Up line of waist: 2.5cm
- (2) Front waist size:  $W/4-1\text{cm}+4.5\text{cm}$  (for pleats or darts).
- (3) Front bottom width: bottom width-2cm
- (4) Front knee width: connect the mid-point of front crotch width to the front bottom width point, the line intersect the knee line, measure from the intersection point to crease line.
- (5) Back waist size:  $W/4+1\text{cm}+4\text{cm}$  (for darts).
- (6) Back bottom width: bottom width +2cm.
- (7) Back knee width: front knee width +4cm.
- (8) Construct two pleats on the front waistline: width 2cm, width 2.5cm.
- (9) Construct two darts on the back waistline: Divide the back waistline into three parts, mark points of center dart line, width 2 cm, length 10cm and 11cm .

### Front

Draw the side seam ( curving inwards 0.3cm), the waistline (with slight curve), the front crotch curve, the inseam line (curving inwards 0.3cm) and curved the hemline and then move it up 0.5cm on the crease line.

### Back

Draw side seam (curving inwards 0.4cm), the waistline, the back crotch (with curve), inseam line (curving inwards 1cm) and the curved hemline, then move it down 0.5cm on the crease line.

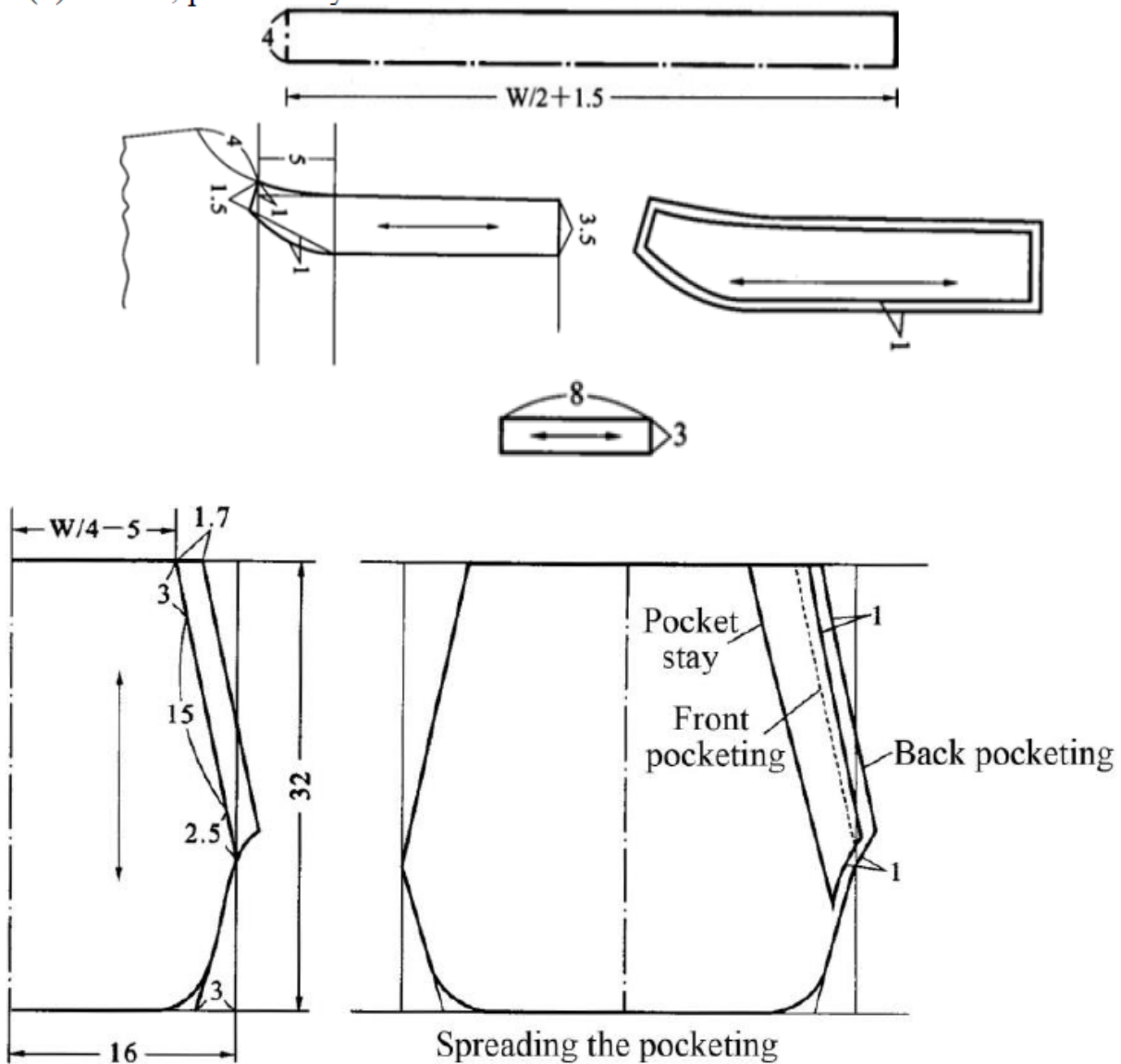
## 3) Draw vertical pocket position on front side seam.





#### 4) Draw parts of the trousers

- (1) Waistband: length= $W/2+1.5$ cm (for right fly width), Width=3cm
- (2) The left fly, right fly and the belt loop
- (3) Pocket, pocket stay





|             |   |                               |
|-------------|---|-------------------------------|
| Revision: 0 | Document Title:<br>Lap Test for operation 1 | skirt/Practical Demonstration |
|-------------|---|-------------------------------|

**Name:** \_\_\_\_\_ **Date:** \_\_\_\_\_

**Time started:** \_\_\_\_\_ **Time finished:** \_\_\_\_\_

**Instructions:** you are required to perform the following request your teacher

### **LAP TEST: basic skirt/Practical Demonstration/**

Instruction: Give necessary templates, workshop, tools and materials you are required to perform pattern making for women's based on small size within 1 hour:-

### **PROJECT INFORMATION**

**PROJECT TITLE:** - Draft t **basic skirt**

TASK 1. Take small size body measurement.

TASK 2. Draft pattern

TASK 3. Give seam allowance and Cut pattern properly

TASK 4. Apply quality inspection



|             |  |   |
|-------------|--|---|
| Revision: 0 | <b>Document Title:</b><br>Lap Test for operation 2 | WOMENS shirt /Practical<br>Demonstration/ |
|-------------|--|---|

**Name:** \_\_\_\_\_ **Date:** \_\_\_\_\_

**Time started:** \_\_\_\_\_ **Time finished:** \_\_\_\_\_

**Instructions:** you are required to perform the following request your teacher

### **LAP TEST: WOMENS shirt /Practical Demonstration/**

Instruction: Give necessary templates, workshop, tools and materials you are required to perform pattern making for women's based on small size within 1 hour:-

### **PROJECT INFORMATION**

**PROJECT TITLE:-** Draft Women's Shirt

## **Lap Test for operation 2**





TASK 1. Take small size body measurement .

TASK 2. Draft pattern

TASK 3. Give seam allowance and Cut pattern properly

TASK 4. Apply quality inspection



|             |  |  |
|-------------|--|--|
| Revision: 0 | Document Title:<br><b>Lap Test for operation 3</b> | <b>MEN'S SHIRT /Practical<br/>Demonstration/</b> |
|-------------|--|--|

**Name:** \_\_\_\_\_ **Date:** \_\_\_\_\_

**Time started:** \_\_\_\_\_ **Time finished:** \_\_\_\_\_

**Instructions:** you are required to perform the following request your teacher

LAP TEST: **MEN'S SHIRT** /Practical Demonstration/

Instruction: Give necessary templates, workshop, tools and materials you are required to perform pattern making for **MEN'S** based on small size within 1 hour:-

### **PROJECT INFORMATION**

**PROJECT TITLE:-** Draft **MEN'S** Shirt

TASK 1. Take small size body measurement .

TASK 2. Draft pattern

TASK 3. Give seam allowance and Cut pattern properly

TASK 4Apply quality inspection





|             |   |   |
|-------------|---|---|
| Revision: 0 | Document Title:<br>Lap Test for operation 4 | <b>TROUSER /Practical Demonstration</b> |
|-------------|---|---|

**Name:** \_\_\_\_\_ **Date:** \_\_\_\_\_

**Time started:** \_\_\_\_\_ **Time finished:** \_\_\_\_\_

**Instructions: you are required to perform the following request your teacher**

**LAP TEST: TROUSER /Practical Demonstration/**

Instruction: Give necessary templates, workshop, tools and materials you are required to perform pattern making for women's/Women's based on small size within 1 hour:-

### **PROJECT INFORMATION**

**PROJECT TITLE:-** Draft Women's/men's **TROUSER**

TASK 1: Take small size body measurement.

TASK 2: Draft pattern

TASK 3: Give seam allowance and Cut pattern properly

TASK 4: Apply quality inspection



## Reference

1. Helen Joseph-Armstrong Patternmaking for Fashion Design, 5th Edition 2009
2. Metric pattern making book
3. Complete Guide to Sewing; THE READER'S DIGEST ASSOCIATION LIMITED; 1987.
4. EOS Level II; UOC 5; Version 2011 G.C.
5. Untitled hand outs.