Chapter 4 Basics of Garment Making

4.1 Fibres and Fabrics

Fibres are the basic components of textile fabrics. Each has a unique characteristic that it lends to the fabrics made from it. Although fabric's character can be altered by yarn structure, by the type of weave and also by the finish that is given to the fabric, the original personality is still evident in the final fabric and is important to its uses and its care.

Before this century all the fabrics were made from natural sources. In recent years a plethora of new fabrics have come into the market, which are products of chemical laboratories or, in other words are man- made.

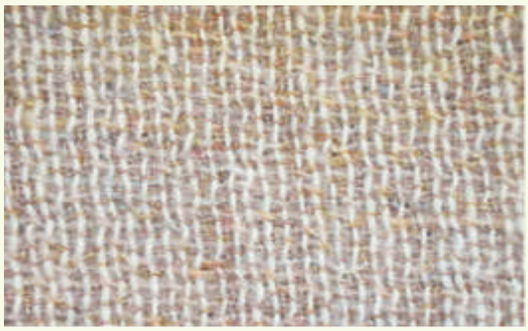
There is a variety of fabrics available in the market; these can be broadly divided into three major categories

4.1.1 Categories

i) Natural

ii) Man made

iii) Blends of natural and man made




Natural fabrics are further categorized into fabrics that are procured from animals and those, which originate from plants.

The commonly available and used animal fabrics are silk, wool, fur, leather etc. However, some experts do not include fur and leather in textile fabrics technically, as they are skins of animals. On the other hand, some do include them, as they are widely used as an alternative to textile fabrics both for garments and household products. The most commonly available and used plant fabrics are cotton and linen.

4.1.2 Characteristics

Natural fibres have the irregularities and sensitivity inherent in natural things. These contribute to the beauty of natural fabrics. *Advantages*: These fibres, due to their natural character, have common qualities of being absorbent and breathe due to the porous structure. Thus, they are more responsive to climatic changes in temperature and humidity and are hence more comfortable to wear under a variety of climatic conditions. The *disadvantage* of natural fabrics, especially for cotton and linen, which is also an inherent quality, is that due to less elasticity they tend to wrinkle. This is also being overcome with a variety of wrinkle-resistant finishes, though at the cost of some comfort. Mercerized cotton is a common example of wrinkle-resistant finish without the application of chemicals, where cotton fibre is spun at very high tension to produce sheen in the yarn and make it more supple thus making it wrinkle-resistant.

Synthetic fabrics have their beginnings in chemical solutions that are forced through tiny holes into chemical bath or air chamber; these harden into long ropes of fibres that are later woven into fabrics. *Advantages:* All synthetic fibres are elastic hence they are wrinkle-resistant. *Disadvantage:* On the other hand almost all manmade fibres are less porous hence they are uncomfortable in hot and humid weather. Certain synthetics like Nylon are thermoplastic and hence can be moulded at controlled temperature and pressure to create interesting textures and design variations; they are called heat-set designs. An all time favourite of this design is heat set pleats. Japanese designers have explored a lot in this technique and have mastered the art of heat set pleating. This pleating can be done at any stage in fabric production at fibre stage, yarn stage or on the final fabric.

Blended Fabrics are combinations of two or more different fabrics. Usually the fibre present in higher percentage dominates the characteristics of the final fabric, but a successful blend will have desirable qualities of all fabrics. One such successful and popular fabric is Terry cot® which is a blend of 65% Cotton and 35% Terylene.

A common problem with the synthetics is the large number of terms used to identify them. For example, Acrylic may be called Orlon® &Acrilan® as they are the registered trademarks of some companies which generally confuse the consumers. In India, the

consumer generally recognises the fabrics by the trade names or the common group terms by which a shopkeeper might be referring to them. Another problem is the fact of the common consumer being misled by shopkeepers selling polyester blended silk as Khadi silk and claiming it to be pure silk. The consumer, therefore, needs to learn to identify commonly used fabrics, as most fabrics cannot be identified by their appearance alone. The information on the fabric bolt can be read, as it is compulsory for the manufacturer to print it on the fabric

4.1.3 Underlying fabrics

Underlining

Underlining is a lightweight fabric that is applied to the wrong side of the garment fabric primarily to **give additional strength, support, and durability** to the garment. Underlining also helps to maintain the shape of the garment and to reinforce its seams. An additional benefit of underlining; it will give a degree of opaqueness to the garment fabric. This keeps the inner construction details and stitching from showing through to the outside the garment. Underlining fabrics are made from various fibres, finished in several different hands (soft, medium, and crisp), and available in a wide range of colours. There are also other fabrics, such as organza, tricot, and lightweight blouse and lining fabrics that are not classified as underlining but can serve the same purposes.

(a) Interfacings

An interfacing is a special type of fabric applied to the inside of a garment to give it **shape, body, and support**. Since it is usually a sturdier fabric than is used for underlining, its effect on the garment fabric is more apparent and definite. An interfacing may be applied to the entire garment but is usually applied only to parts, such as collars, front or back openings, lapels, and hems, and to such details as pocket flaps.

Interfacings are made from many different fibres in several weights and degrees of crispness; they may be woven or non-woven. A comparatively new category of interfacings, fusible interfacings, instead of being stitched to the garment fabric, are ironed onto it. Fusible, too, may be woven or non- woven. The wide range makes it possible to choose an interfacing that will be compatible with any type of garment fabric. Two considerations are critical in selecting interfacing: (1) it should complement and reinforce the garment fabric without overpowering it; (2) though the two fabrics need not be identical in fibre content, it is always best that they should have the same care requirements.

(b) Interlining

Interlining is a layer of fabric inserted between the **face or shell and the lining** of the garment. It is similar to batting, a thick layer of fibre designed to provide

insulation to heavy winter jackets. Depending on the application, the materials in this layer can be woven, knitted, or created by fusing fibres together. Silk, wool, and artificial fibres with good insulating qualities are common choices for interlining.

Interlinings can be soft, thick, or flexible. Some are designed to be fused, while others are intended to be sewn to one or both layers of the textile. As an inner lining within textiles, it is used in a number of applications. Though the consumer never sees it, it is the difference between a good winter coat and a great one. Interlining is applied to a garment to supply warmth during wear.

(c) Linings

A lining is applied to the inside of a garment to finish it and to hide the garment's inner construction. No matter what type of garment, it is used for the in-dress, coat, jacket, pants- a lining is a luxurious as well as functional finishing touch. Most often made from a relatively slippery fabric, a lining can match or contrast with the colour of the garment. It can even be made of a printed fabric, as long as it does not show through to the outside of the garment. Lining adds a degree of warmth to a garment as well as making it easier to put the garment on and take it off. Though lining fabrics may be of many different fibres, any specific choice should be limited to fabrics that are compatible with the care requirements of the rest of the garment. Besides this, a lining should be sufficiently opaque to conceal the garment's inner construction. Its qualities should be appropriate to the type of garment it is being applied to.

4.1.4 Selection of Underlying Fabric

In considering which of the underlying fabrics are advisable or necessary for the garment being constructed, it is much easier to decide about a lining or interlining than about underlining and interfacing. Lining and interlinings are, in effect, extras added to a garment for comfort and, in the case of lining to conceal the inside of a garment. Neither of these helps in any way, however, to build in or maintain the shape of the garment.

This is done by Underlining and interfacing.

There are two determining factors with that affect the type of underlining:

(1) The shape or body intended by the garment design

(2) The support needed in order to achieve that design in the desired fabric.

Generally speaking, the more structured and detailed a design or style is, there greater the need for an underlining and interfacing. The weight of the garment fabric is a factor too the lighter in weight or softer the fabric is the more support it needs.

Activity

Collect swatches of fabrics. Create a folder and identify the fabrics collected, also list the fabric content, commercial name and price of the fabrics. This will become a resource guide for you for fabrics.

Fill in the blanks

1. The fabrics can be characterized into _____, _____ and _____fabrics.
2. The inter lining in the garment is for providing _____ and _____ to the garment.
3. Underlying fabrics are _____& _____
4. A lining should be sufficiently _____ to conceal the garment's _____ construction
5. Interlining is added in between the _____ and _____ of the garment.

Review Questions

1. Define Fibres. Explain various types of fibres based on their origin?
2. Define advantages and disadvantages of natural fibres
3. Name 2 fabrics that serve the purpose of underlining

4.2 Cutting Preliminaries

4.2.1 Fabric preparation

An essential step before starting to construct the garment is fabric preparation, that is to treat the fabric before cutting it out in order to achieve a better fit and professional look. Different fabrics will need different care and the labels on the fabric bolt will provide information on, whether the fabric is washable, to be dry cleaned, or prove to shrinkable. The label should carry information whether the fabric has been pre-shrunk by the manufacturer or if it will shrink, and if so to what extent. To preshrink washable fabric, simply soak, wash and dry in the same manner as one would after the garment is finished.

To preshrink dry-clean fabrics, use a steam iron and move the iron horizontally or vertically across the grain of the fabric (never press fabric diagonally as this may distort the fabric). After steaming the fabric allow it to dry on a smooth, flat surface until completely dry. (About 4-6 hours).Trims such as zippers and laces etc may also need preshrinking.

Proper fabric preparation is an essential preliminary to cutting. Understanding of the fabric and its properties is since fabric is the most important component of any garment. In weaving, warp or fixed yarns are interlaced at right angles by filler or weft yarns.

Selvedge: The lengthwise finished edges of a woven fabric. Selvedge (self edge of a fabric) is a narrow, firmly woven strip along the length of the fabric.

Grain is the direction in which the yarns are woven. The lengthwise and crosswise threads of a woven fabric used in its construction. The lengthwise grain runs parallel to the selvedge of the fabric. This has the least amount of stretch. The crosswise grain runs perpendicular to the selvedge and has a little more stretch than the lengthwise grain. Crosswise grain is used vertically only to achieve a certain design effect, as in border print placement.

The **Bias grain:** The diagonal of a woven fabric in which a true 45-degree angle is formed. The bias has the greatest amount of stretch. A bias-cut garment usually drapes softly. It also tends to be unstable at the hemline.

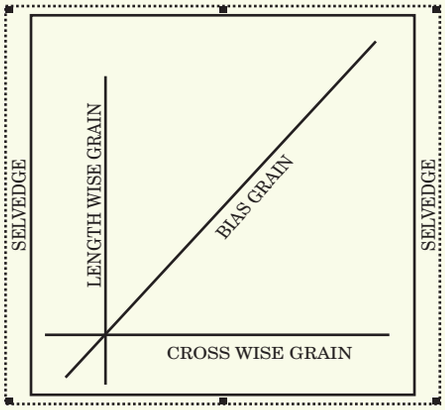
4.2.2 Fabric cutting

Cutting of Fabric: Three methods are used for cutting different kinds of fabric.

Tearing is the fastest, but appropriate only for firmly woven fabrics: other types may snag or stretch. **Drawing a thread** is slower, but the most suitable for loosely woven, soft, or stretchy fabrics.

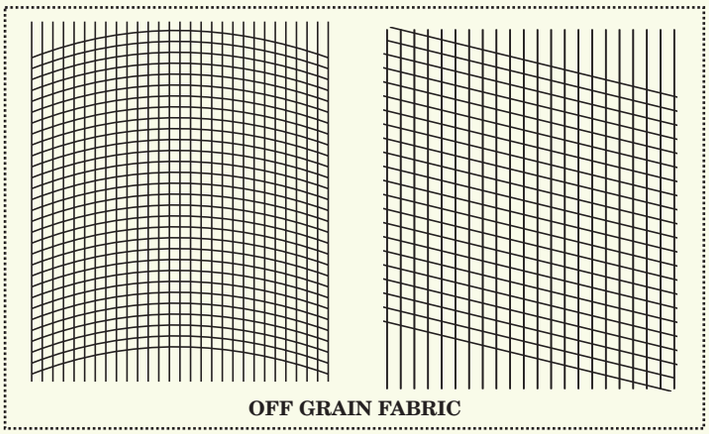
Cutting on a prominent line is a quick, simple method for any fabric that has a strong woven linear design.

Checking fabric alignment comes next. During manufacture, the fabric may have been pulled off-grain, so that grain lines are no longer at perfect right angles. A garment made with such fabric will not hang correctly, so re-alignment must be done before cutting. Bear in mind that not every off-grain fabric can be corrected, especially those that have water repellent or permanent press finish, or a bonded backing.



Blocking off-grain fabric

First thing one need to ensure is that fabric is on grain. Fold the fabric in half lengthwise lining up the ends and selvages. If the fabric is on grain it will lay flat. If it bubbles it is off-grain it needs to be straightened. If not, then one needs to straighten the crosswise ends of the fabric. For correction of 'off-grain fabric', pull it diagonally at the opposite ends. First in one direction then in the other, this process is also known as blocking. For all other woven fabrics, cut into the selvage and gently pull one or two crosswise threads pushing fabric along the threads till the opposite selvage. Then cut the fabric along the pulled thread. Repeat these methods on both ends of the fabric. All fabrics can be straightened except for permanent-finish fabrics.


OFF GRAIN FABRIC

To straighten slightly off-grain fabric leave it folded lengthwise and pin together the selvages and both ends making sure they line up, then using a steam iron press from the selvage to the fold.

Different fabrics require different methods. For knit fabrics simply cut along a crosswise rib. On striped, plaid, or checked fabric simply cut along a straight crosswise line.

4.2.3 Grain line

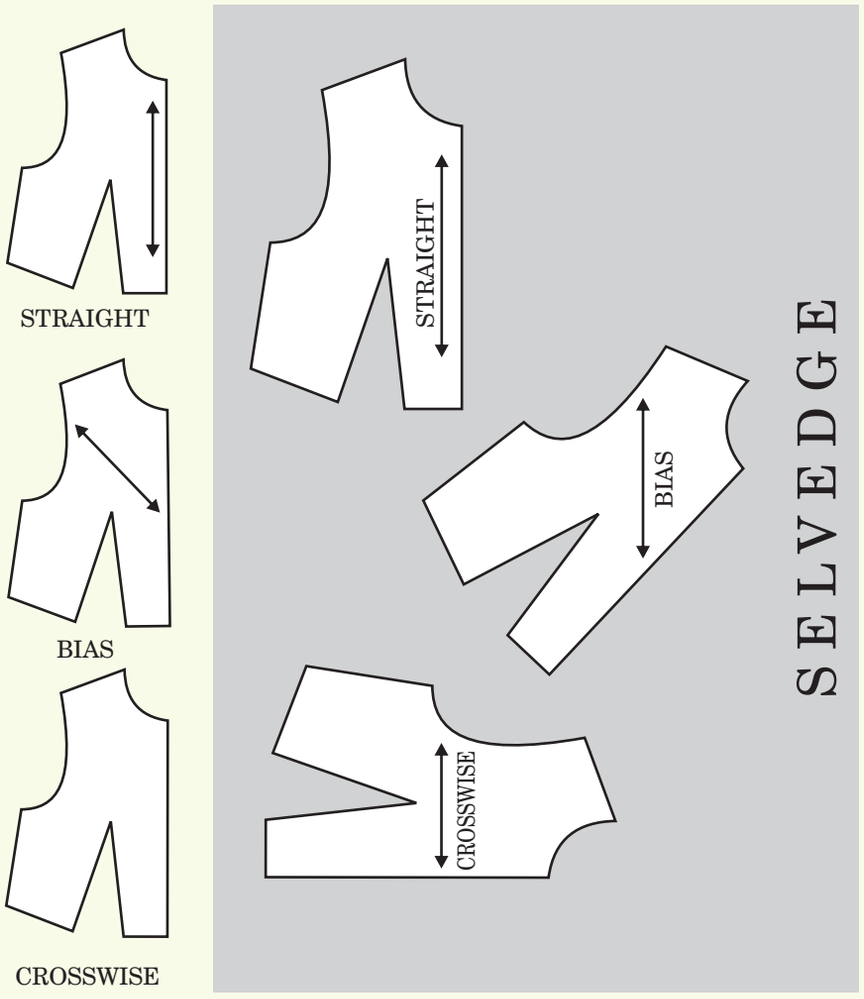
Grain line is a line drawn from end to end on each pattern piece to indicate how the pattern should align with the lengthwise grain of the fabric. Which ever direction the grain line is drawn on the pattern, it will always be placed parallel to the selvedge on the fabric.

Direction of Grain line

Straight Grain line: For garments to be cut on straight grain, grain line is drawn parallel to the centre front or back of the garment along the length of the piece.

Crosswise Grain line: For garments to be cut on cross wise grain, grain line is drawn at right angle to the centre front or back of the garment or across the garment width.

Bias Grain line: For garments to be cut on the bias, grain line is drawn at an angle of 45O to the centre front or back of the garment.



4.2.4 Preshrinking

Some fabrics have the inherent character of being prone to shrinking, like cotton. It is advisable that when sewing these fabrics, care should be taken to check the fabric shrinkage. There is no fixed percentage that can be attributed, to the shrinkage of a

fabric. The fabric characteristics are also determined by the yarn and fabric construction. Hence no single formula can be given for determining the exact percentage of shrinkage.

To **preshrink** washable fabrics, launder and dry it.

It is recommended that cotton fabric be soaked in cold water overnight before cutting. Inaddition iron fabric well before cutting as any folds retained in the fabric will create a fitting problem later. This technique will take care of shrinkage and also of colour bleeding if required. In case the colour of the fabric runs, put colour fixer, (a number of brands are available in the market or can be fixed with a home mix of a table spoon of salt and half a cup of vinegar in half a bucket of water) in the same water in which fabric is soaked. This is only required for unblended cotton fabric. Woolens should be dry cleaned if one is not sure that they can be hand washed. Silks too should be dry cleaned until one is absolutely sure about the wash ability of the fabric. All synthetic fabrics should be pre-soaked in cold water and well ironed to remove all folds and creases before cutting.

If both shrinking and grain adjustment are necessary, preshrink first, and then re-align grain. Steam iron fabrics that are wrinkled or have crease lines.

4.2.5 Identifying Right Side of Fabric

Right side or face of fabric should be identified before cutting. Often it is obvious, but sometimes careful examination is needed to identify the right side from inside of the fabric. One method of identification is the way fabric is folded-cottons and linens are right side out, wools wrong side out. If fabric is rolled on a tube, face is to the inside. Other indicators are Smooth fabrics are shinier, slicker, or softer on the right sides. Textured fabrics are more distinct on the face for example, slubs may be more outstanding on the right side. Twill fabric is better defined on the right side. Such fabrics often have small irregularities such as extra thick nubs, on the wrong side. Fancy weaves, such as brocade, are smoother on the right side, floats usually loose and uneven on the back. Printed designs are sharper on the right side, more blurred on the back. The selvage is smoother on the right side. Some knits roll toward the right side when stretched crosswise.

The fabric face is generally more resistant to soil and abrasion but you can use the wrong side out if you prefer its look. When there is no visible difference between sides, mark on the back with chalk to avoid confusion.

4.2.6 Folding Fabrics for Cutting

The first step in following a cutting layout is to determine how fabric should be folded, if at all. Precision is vital here. Where selvages meet, they should match exactly. Slippery or soft fabric can be pinned at selvages every few inches. If the material was folded at the time of purchase, make sure the fold line is accurate and re-press it if necessary. When no fold is indicated, lay fabric right side

Pinning

For pinning pattern to fabric, the general order is left to right and fold to selvage, for each pattern piece. Pin fold on grain line arrow first, then corners, and finally edges, smoothing pattern as you pin. Place pieces as close together as possible, overlapping tissue margins where necessary. Even small changes may result in the pieces not fitting into the space apportioned to them.

The efficient way to place pins is diagonally at corners and perpendicular to edges, with points toward and inside cutting lines. (For delicate fabrics, leather and vinyl, in which pins could leave holes, take care to pin within seam allowances.) Use only enough pins to secure fold lines, grain line arrows, corners, and notches. Use of too many pins can sometimes distort fabric, making it difficult to cut accurately. A few pins more than generally used to pin a pattern piece in place, may be needed for slippery or soft fabrics. A firm hand is required to be placed on the pattern to hold it in place while cutting the fabric; this provides adequate control and ensures that fabric doesn't slip.

4.2.7 Marking Methods

Marking-the transfer of significant pattern notations to fabric- is done after cutting and before removing pattern. Common marking methods and their typical uses are discussed below. In general, any device can be used provided it makes a precise, clear, mark without disfiguring the material. Always pre-test a fabric swatch to be sure marks show up clearly and can later be removed.

Using a **tracing paper and wheel** is a fast method that works best on plain, opaque fabrics. It is less satisfactory for multi-coloured fabrics, and not recommended for sheers as marking shows through to the right side. It is preferred to other methods for its convenience, but the wheel can rip tissue, thus limiting the reusability of a pattern. While tracing, keep cardboard under fabric to prevent marring of the surface beneath. Use serrated wheel for most fabrics, smooth wheel for those that are delicate, hard to mark, or napped. With fabric folded wrong sides together, both layers can be marked at once using double -faced paper or two sheets back to back. With fabric right sides together, layers are marked one at a time. Only dots are registered, but these can be connected, if desired, after pattern is removed.

Tailor's chalk is also a quick marking device. For this use ruler and chalk, regular or wax type. The first tends to rub off easily; the wax type is more durable, but cannot be removed from some fabrics.

Thread Tracing is done on fabrics which are delicate and slippery to mark the seam allowances, grain, dart, centre front, centre back, waist etc. it is to be done on right side of the fabric. It has an advantage that it does not leave marks and is very effective for jackets dark colour fabrics

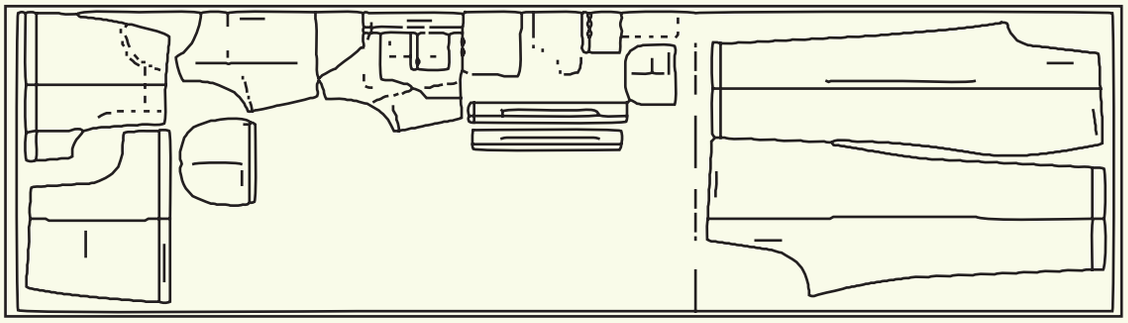
4.2.8 Pattern Layout

It takes time and effort to fit together all the a pieces of pattern. It is like playing a giant puzzle. The game is to place all the pattern pieces on grain in such a manner so as to be able to use the entire width and the length most economically.

Place the fabric on a flat surface. Line up its straightened edges with the straight edges of the cutting surface. Place the pattern in position. Start with one end of the fabric. Support the weight of the cloth at the other end of the cutting area. Always place the largest piece first, then the ones that may need to be cut on fold. Fit in the smaller pieces. Fit in the shapes against each other, locking them whenever possible. This saves a lot of fabric. Arrange the pattern pieces in such a manner that if any fabric is left, it is in one usable piece, either at an end or middle.

The pattern pieces have to be laid out in such a way that it takes into account **directional properties** of fabric, such as fabric design and fabric grain. **Mitering** is the perfect matching of check or stripes and other directional prints on the side seam, centre back and centre front seam or any seam that might be running across the garment such as a yoke or waistline seam. This might require more fabric consumption and great deal of time and effort, for a perfectly mitred garment is a joy and pride of a designer and master tailor.

DUNGAREE PATTERN LAYOUT
ON FOLD



S E L V E D G E

4.2.9 Computerized Marker Making

All the pattern pieces of the garment are either digitized or drafted on the computer and a lay of the garment is made. A rectangle of the dimensions of the fabric is created and the pattern pieces are placed on it in exactly the same manner as one would on a fabric keeping in mind whether a piece is to be cut on fold, on bias or on a cross grain.

This exercise ensures that more scientific, precise and accurate fabric calculation is done.

Cutting

For accurate cutting results, always keep fabric flat on the cutting surface, and use proper shears and techniques. Bent handle shears help in keeping fabric flat. These are available in four blade types- plain, serrated, pinking, and scalloping. Plain and serrated blades can be used interchangeably, but serrated blades are designed to grip knits and slippery fabrics. Pinking and scalloping shears should be used only for seam finishing. A7 or 8 inch blade will suit most cutting situations: a 9-inch length is better for heavy fabrics. Be sure that blades are sharp; dull ones will chew fabric. If the scissor action is stiff, adjust the blade screw slightly or apply greaseless lubricant.

4.2.10 Cutting Special Fabrics

Certain fabrics involve special considerations in pattern selection and layout. A fabric can fall into one or more problem categories.

Directional Fabrics

Directional fabrics are so called because they must be laid in **one direction** for cutting, example are napped fabrics (with pile or brushed surfaces); designs that do not reverse (one -way designs): and surfaces that reflect light in varying ways (shaded).

To test a **napped fabric** (one with pile or brushed surface) for direction, run a hand over it. It will feel smooth with nap running down, rough with nap running up. **Short naps** (such as corduroy) can be cut with nap running up for rich colour tone or down for a frosty effect. The same is true of shaded fabrics. Long piles or shags should be cut with nap running down for better appearance and wear, one-way designs are cut according to the natural bent of the design, or the effect desired.

Because all pattern pieces must be laid in one direction, a crosswise fold cannot be used.

Plaids, Stripes and prints

Even and Uneven Plaids

A plaid is a design of woven or printed bars that intersect at right angles. The arrangement of these bars may be even or uneven. A four sided area in which the colour bars form one complete design is called a **repeat in half,** first lengthwise, then crosswise. A **plaid** is even when colour bars and intervening spaces are identical in each direction. Stripes also may be even or uneven; each type is handled by the same methods as a corresponding plaid, the exception is a diagonal stripe.

Plaids, either **square or rectangular,** are the easiest to work with, though a rectangular plaid is somewhat more difficult to match where seam is on bias. An even plaid is suitable for a garment with a centre opening or centre seams, also for one that is cut on the bias

Uneven plaids require extra thought and care in layout planning and have fewer style possibilities. When plaid is **uneven** crosswise, pattern pieces must be laid in one direction, like napped fabrics, when plaid is uneven lengthwise, the repeats do not have a centre from which the design can be balanced out in both directions, and so the design goes around the body in one direction only. Placing a dominant vertical bar or block at centre front and back can establish a type of balance, however. Avoid design with centre seams or kimono or raglan sleeves. An exception can be made to these precautions when a plaid fabric that is uneven lengthwise is reversible. In this case, the pattern should have centre seams, or they must be created. Plan the layout so that the design reverses itself to each side of the centre seams. This is accomplished by cutting each garment section twice, with printed side of the pattern facing up, and using wrong side of fabric for half the garment.

When plaid is uneven in both directions, the same considerations apply as for plaids that are uneven lengthwise plus the need to lay all pattern pieces in one direction as **for napped fabrics.**

Diagonals

For diagonals, avoid any pattern and design with centre seams, long diagonal darts, gored/ panelled skirt, collars that are required to be cut on a fold, or even a V-neckline.

Here the wrong side of the fabric is used for half the garment; diagonals are then balanced. In chevron or cutting a plaid, the stripe can also create V-shaped seams. Chevrons can also be created by cutting a plaid, stripe, a other geometric on the bias. To work this way, a design must be even lengthwise.

Diagonals should be cut from a single layer-each pattern piece pinned once with printed side up, once with printed side down.

Unusual Prints

Fabric with a large motif requires careful placement, and sometimes matching, of the design. A precise motif, such as a diamond, must be cantered and matched just like a plaid. To decide placement, drape fabric over your figure before a full-length mirror and try various approaches. If the garment has centre seams, motifs might be placed opposite one another an equal distance from the centre. As a rule, though, the asymmetrical balance is more pleasing. In any case, do not place motifs directly on the full part of bust or buttocks. Another point to remember: a large scale print is often a one-way design, in which case pattern pieces must be laid out as for directional fabrics.

Border Prints

Border print fabric is one with a marginal design running lengthwise along one edge. It can be used in two ways. One is to run the border vertically, placing it to each side of

centre front and/ or centre back seams. The other, more usual way is to place the border at the garment hem. For the latter, major garment sections are cut on the crosswise grain (with new grain line arrows drawn perpendicular to the original ones). If the garment being cut this way has no waistline seam, its entire length must fit on the fabric width, leaving little or no hem allowance.

Activity

Collect swatches of fabric which will require special care of cutting a garment. Create layouts of sample fabrics. Place them in your folder and identify the problems these fabrics can have, also list the shrinking and aligning methods. This will become a resource guide for you for the fabrics.

Fill in the blanks

a) The fabrics should be _____to ensure that the garment doesn't _____after being stitched.

b) The methods of marking a fabric are _____, _____ and _____.

c) For jackets _____is the best method of marking

d) Napped fabrics can be marked by _____ on the _____ _____ of the fabric.

e) The _____ & _____ fabrics are more distinct on the right side of the fabric.

f) Care should be taken to lay special fabrics like _____, _____, _____ & _____ in _____ _____ only.

g) A _____ is even when _____bars and intervening _____ are identical in _____ direction.

h) When plaid is _____ in both directions, the same considerations apply as for _____ fabrics.

i) _____prints are generally placed at hems.

j) Computerized marker ensures that the most _____, _____ and_____ fabric _____ is done.

Review Questions

1. What is a fabric grain?
2. What are the three kinds of fabric grain?
3. Define Mitreing.

4.3 Placket

A placket is an **opening** in the upper part of trousers or skirts, or at the neck or sleeve of a garment. Plackets are almost always used to allow clothing to be put on or removed easily, but are sometimes used purely as a design element. Modern plackets often contain fabric facings or attached bands to surround and reinforce fasteners such as buttons, snaps, or zippers.

In modern usage, the term placket often refers to the double layers of fabric that hold the buttons and buttonholes in a shirt. Plackets can also be found at the neckline of a shirt, the cuff of a sleeve, or at the waist of a skirt or pair of trousers.

Plackets are almost always made **of more than one layer** of fabric, and often have interfacing in between the fabric layers. This is done to give support and strength to the placket fabric because the placket and the fasteners on it are often subjected to stress when the garment is worn. The two sides of the placket often overlap. This is done to protect the wearer from fasteners rubbing against their skin and to hide underlying clothing or undergarments.

A button front **shirt** without a separate pieced placket is called a "French placket." The fabric is simply folded over and the buttonhole stitching secures the two layers (or three layers if there is an interlining). This method affords a very clean finish, especially if heavily patterned fabrics are being used. This method is normally only used in stiff-fronted formal evening ("white-tie") shirts. However, the normal, separate placket on a shirt gives a more symmetrical appearance.

If the buttons are concealed by a separate flange or flap of the shirting fabric running the length of the placket, it is called a "fly front." The inner placket of a fly front shirt can be made as a less constructed French placket or as a fully constructed regular placket

Plackets

A placket is a finished opening in a garment section. Placket should be designed and styled in sufficient length to permit ease and convenience of dressing. Placket openings are used on sleeves to allow expansion of the narrow end and to provide room, when the cuff is opened. They are used on front or back neckline opening instead of a zipper. Plackets are planned as extension for placement of buttonholes, snaps and other fasteners.

The type and length of placket selected depends on:

- Placement of placket.
- Function of placket.
- Style and design of garment.

- Use of garment.
- Type and weight of fabric.
- Care of garment.
- Method of construction.

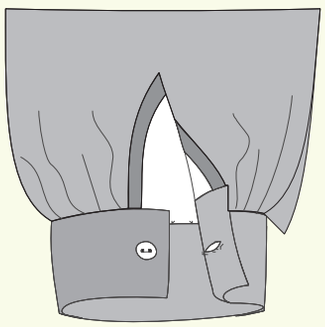
4.3.1 Continuous Placket

This type of placket is easy to make and serves as the basis for a number of variations. This one piece placket is widely used on cuffed sleeve openings to permit the hand to fit through sleeve circumferences, bloomers, children's' dresses, and on skirts and trousers, where zipper application would detract from appeal of the garment and as a neckline opening alternative to other fasteners or closures.

Pattern Piece Required:

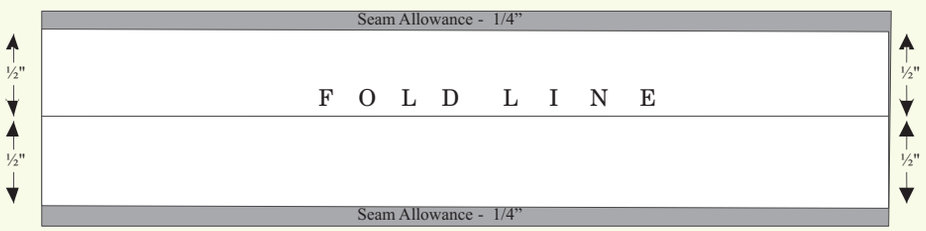
Cut the pattern piece for length of the piece, take double the length of the finished placket opening and add 1" extra. (The 1" extra length of the binding strip is for emergency only. If measurements are accurate and the placket is properly made, this amount should be cut off after the binding is stitched in place.) The width of the piece will be twice the width of finished placket facing (which is usually ½" for 1 side) plus two times seam allowances (which usually is ¼")

CONTINUOUS PLACKET



PATTERN PIECES

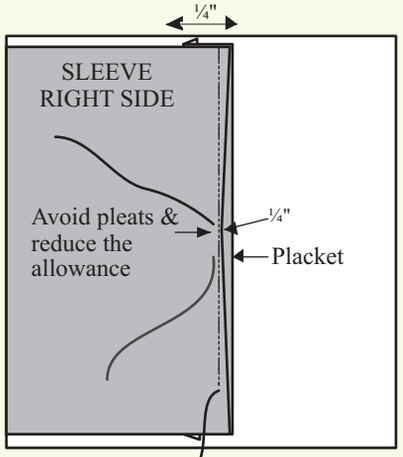
2 X length of finished placked + 1"



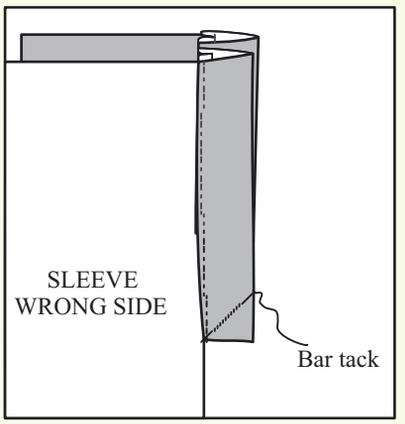
Steps of Construction

1. Place the right side of the placket on the wrong side of the sleeve opening and start stitching near the edge leaving a distance of ¼". As you come in the centre of the placket, maintain ¼" seam allowance of placket piece and reduce the allowance of the garment piece. Take care so that no pleat formation takes place at this point.
2. Fold the allowance (other side) of the placket and place it on first stitching line. Then stitch in place from right side of the sleeve. Take care that stitching at the back is the same i.e. if it is on top, it should be maintained on top throughout and if it is in ditch then maintain it throughout. In good quality plackets, this seam is on top at the back.
3. From wrong side of the sleeve, stitch both the upper and under of the placket, 2 to 3 times diagonally (at 45°) near end. This is known as Bar Tack.

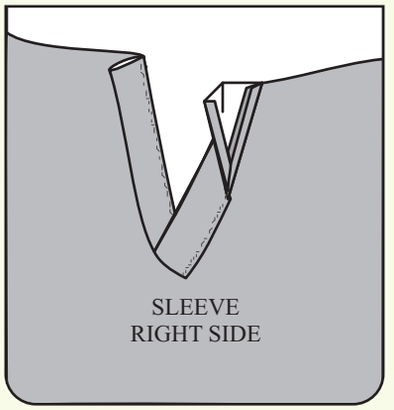
Continuos Shirt Placket



Step-1



Step-2



Step-3

4.3.2 Simple Shirt Placket

Two pattern pieces are required one for the upper part and other for the under part.

Upper Part

Trace the bodice till centre front line. Mark the extension; which is taken as half the button + 1 cm i.e. Radius of the button + 1cm = extension. Or it is taken as the diameter of the button. Otherwise a standard measurement of ½" or ¾" is taken for men's shirts.

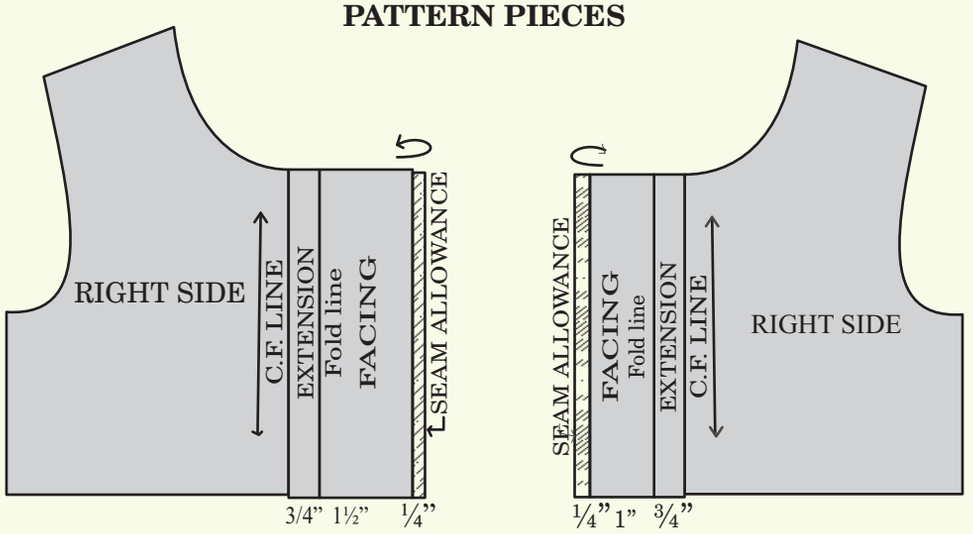
The line of extension is the fold line. After this a standard facing of 1½" is made, an allowance of ¼" is then taken. Turn the allowance towards wrong side of the facing. Then turn fold line towards wrong side of the garment piece. (If facing has to be aligned to the selvedge when placed on fabric, then no seam allowances is taken). Cut out the pattern.

Under Part

Flip the pattern horizontally, trace it. Under part is made in the same way as you make the over part the difference being the facing, which is 1". Otherwise stitching line of under part will be visible on the front of the placket.

SIMPLE SHIRT PLACKET

PATTERN PIECES



Steps of Construction

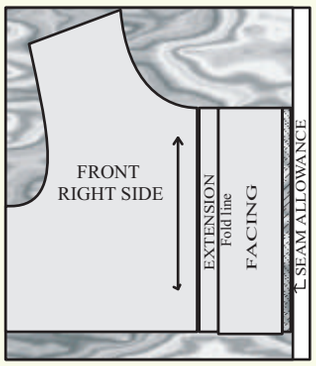
Upper Part

1. Trace the pattern on the fabric and mark the position of the lines.
2. Turn the allowance towards the wrong side of the fabric. Turn the facing also in the same way from fold line i.e. towards wrong side of fabric.
3. On the wrong side of fabric, machine stitch on the edge of facing as illustrated.

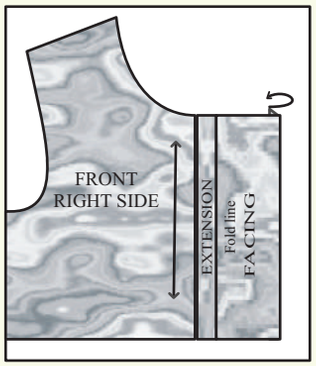
Under Part

1. Trace the pattern on the fabric and mark the position of all lines.
2. Turn the allowance towards wrong side of the fabric. In same way turn the facing also.
3. From the wrong side of the fabric, machine stitch on the edge of the facing as illustrated.

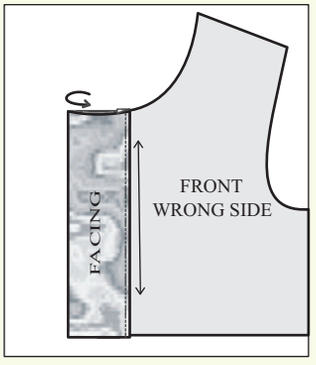
UPPER PART



Step-1

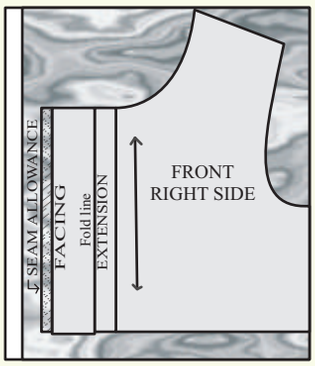


Step-2

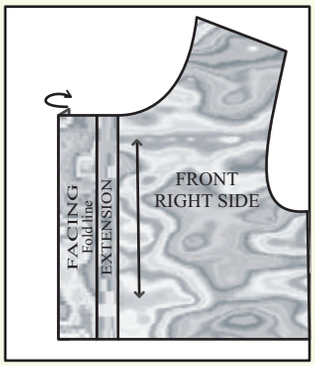


Step-3

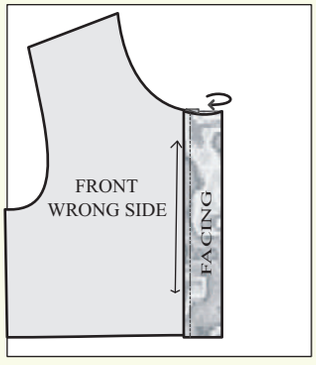
UNDER PART



Step-1



Step-2



Step-3

4.3.3 Shirt Placket with Facing

The shirt band/the strip on the right side of shirt front in which the buttonholes are made, eliminates the need for facing. An extended self-facing is used on the left front. The finished shirt band is 1½" wide but construction techniques vary depending on the fabric and style of the shirt.

Pattern pieces required

Under Part

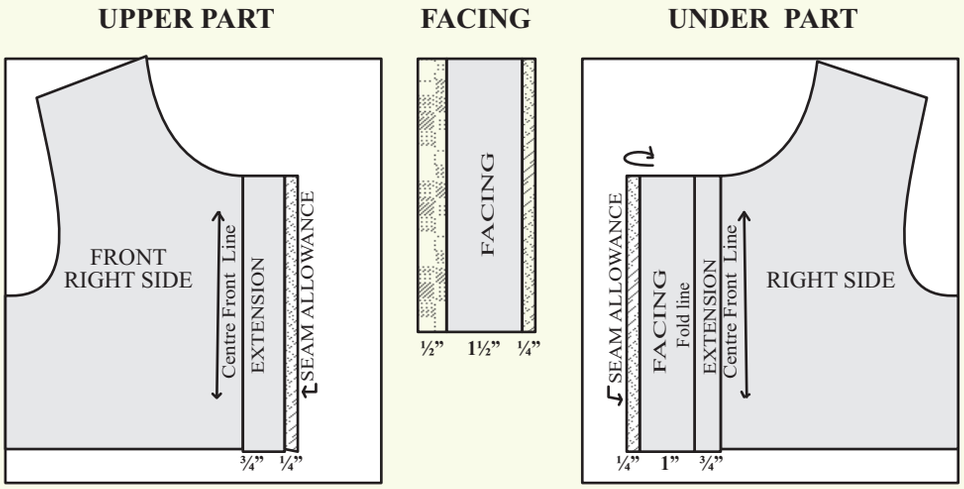
Trace the bodice and make extension of ¾" which is half of finished placket. Then give an allowance of ¼".

Facing

A straight strip of the length same as placket opening is taken, mark ¼" seam allowance on one side and ½" seam allowance on the other side.

Under Part

Flip and trace the other half of bodice and mark extension of ¾" and facing of 1" then mark the seam allowance of ¼".



STEPS OF CONSTRUCTION

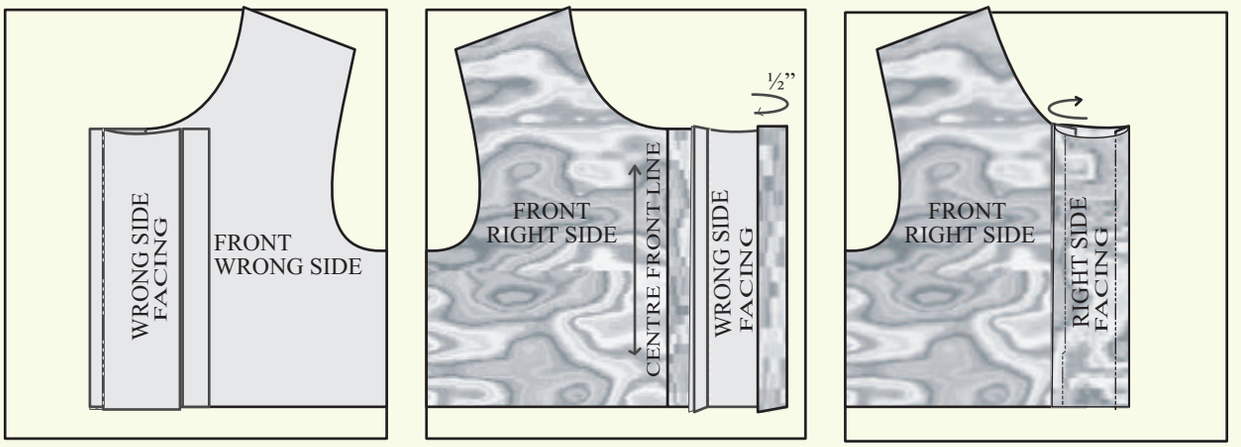
Upper Part

1. Place right side of the facing over wrong side of garment piece and then stitch leaving the ¼" allowance near edge.
2. From right side of the fabric, turn facing towards right side. Press the seam allowance (½") of facing towards wrong side of facing. Iron in place.
3. Leave allowance of ¼" from both the sides and stitch in place from right side.

Under Part

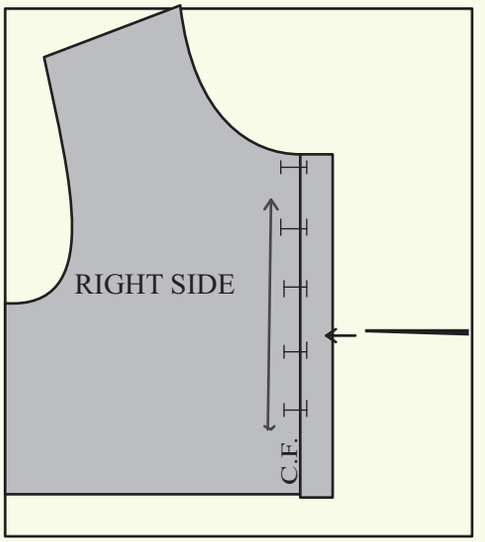
Trace the pattern for under part on the fabric. Fold the seam allowance of the facing towards the wrong side of the fabric. Again turn this facing towards the wrong side of the fabric, stitch in place.

(For diagram refer steps of construction for under part of simple shirt placket.)



Step-1 Step-2 Step-3

4.3.4 Buttons Placement



The button extension is equal to the width of the button. As a general rule, the neckline of the front bodice is lowered by ¼" at the centre front for comfort, whenever a basic neckline is required. The first buttonhole is placed on centre front, down from neckline an amount equal to the width of the button. This ensures that the button will not extend into the neck. Placement of the last button hole depends on the need of the garment. The rest of the button holes are marked on the even division between the first and the last. It is a good idea to place a button close to the apex or bust point, this ensures that the garment does not gape open at centre front due to movement which may cause a pull on the bust.

The size of the button hole equals the width of the button plus 1/8" for the button to go in easily. The button hole is marked so that width of the button is on the garment side of the centre front and extra 1/8" is on the extension.

Activity

Collect pictures of garments with different kinds of openings, identify the fasteners used. Place them in your folder and identify the buttons and other trims used for fastenings. This will become a resource guide for you for the fasteners.

Fill in the blanks

a. The placket is a _____ given to the garment _____.

b. Placket should be _____ and _____ with sufficient _____ to permit movement.

c. _____, _____ and _____are kind of plackets.

d. The size of the _____ determines the size of button hole and width of _____.

e. The first buttonhole is placed on _____, _____ from neckline an amount _____ to the _____ of the button.

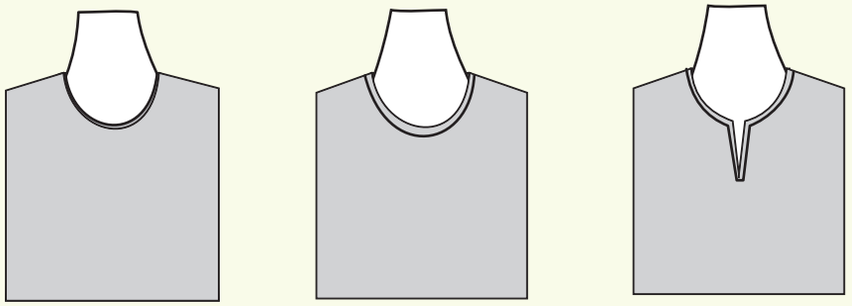
4.4 Neckline Facings

A facing is the fabric used to finish raw edges of a garment at such locations as neck, armhole and front and back opening. There are three categories of facings: Shaped facings, extended facings and bias facings.

A facing is shaped to fit the edge it will finish, either during cutting or just before application. A "shaped facing" is cut out, using a pattern, to the same shape and on the same grain as the edge it will finish. A "bias facing" is a strip of fabric cut on the bias so that it can be shaped to match the curve of the edge it will be applied to. After a facing is attached to the garments edge, it is turned to the inside of the garment and should not show on the outside.

In order to reduce bulk, both shaped and bias facings can be cut from a fabric lighter in weight than the garment fabric. As the extended facing is cut as one with the garment, garment and facing fabric are always the same but some times may vary according to the design.

NECK LINES



BIAS BINDING BIAS FACING SHAPED FACING

4.4.1 Bias Strip

Bias strip is prepared as a strip of matching or contrasting fabric. In construction it is used to conceal, finish and strengthen seams and raw edges or as a substitute for facings. Bias may be used as decorative binding, piping, or tubing. Bias for binding, piping and tubing is a true bias and is defined as the diagonal line established by a 45° degree angle, intersecting length and cross grain of a square. The bias of the fabric offers the maximum stretch, flexibility, and elasticity needed to conform to a curved edge.

Bias may be self-prepared, specially manufactured for industry, or commercially prepared and purchased in retail stores.

Commercially prepared, pre-cut and folded bias bindings are also known as bias tape or "bias fold" they are available in a variety of width and placement of bias selected depends on:

- Style and design of garment
- Type of garment
- Use of garment
- Care of garment
- Choice of fabric
- Method of construction
- Availability of machines and attachments
- Procedures for production

4.4.2 Preparation of Bias Strip

Steps of construction

- First of all find the true bias of the fabric by folding fabric with lengthwise grain parallel to the crosswise grain. The fold edge is the true bias.
- After locating true bias, draw the width and the desired number of strips needed for desired length of bias and then cut it.
- Many times the bias stripes are not long enough to complete a continuous sewing step. Adequate number of strips must be joined before starting to sew bias binding or facing. Now Place the cut out bias strips at right angles, right side facing right side.
- Stitch bias strips with a ¼" seam allowance at angles.
- Continue to join bias strips as needed for the desired length. Press all seams open and snip extended points.

  Once the strip is ready it can be applied on the neckline

4.4.3 Neckline Finished with Bias Binding/Extended Facing

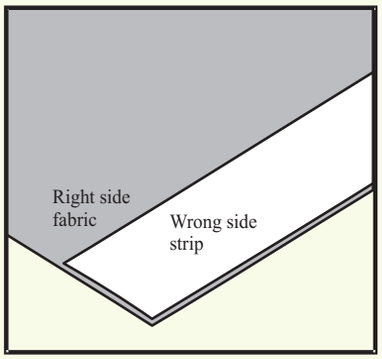
Bias binding is used to finish and strengthen raw edges and also to add a decorative trim to garment. In some case it may replace a facing at the neckline, sleeve or armhole edges.

A standard bias strip is 1 to ½ inch wide is required (either in the same or contrasting colour of the garment). A commercially prepared double fold bias tape can also be used.

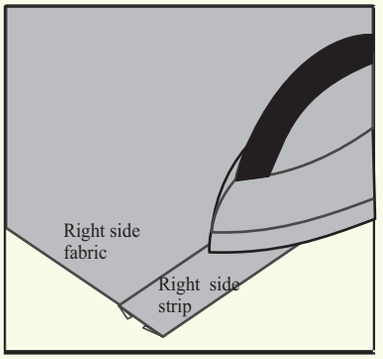
Steps of Construction

- Place the garment on sewing table wrong side up. Now place the bias strip on the garment with right side facing wrong side (of garment), matching both the raw edges.

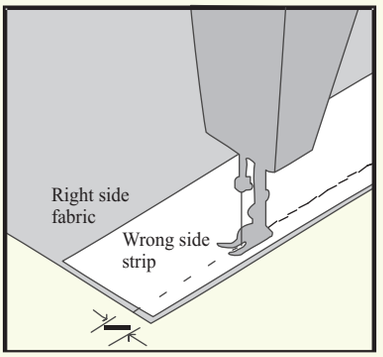
- Stitch with a ¼" seam allowance.
- Fold the bias strip over ¼" and press down.
- Fold bias binding over along stitch line and press down.
- Fold bias strip over Wrong Side of garment just covering first stitch line.
- Slip stitch along the edge of bias binding.



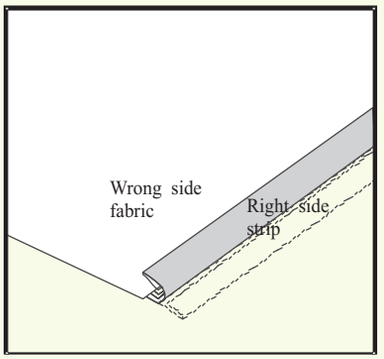
Step -1



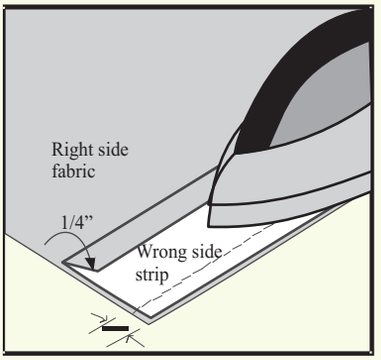
Step -4



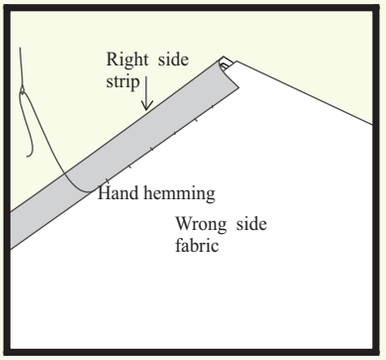
Step -2



Step -5



Step -3



Step -6

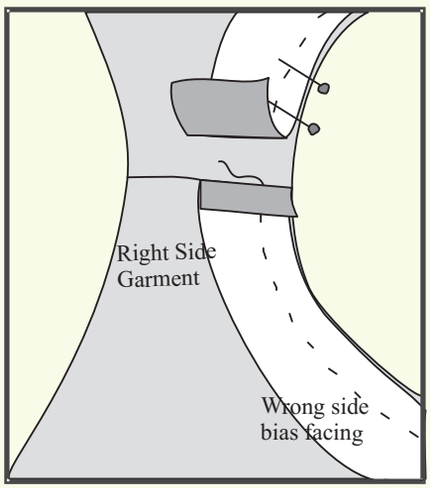
4.4.4 Neckline Finished With Bias Facing

A bias facing is a strip of fabric cut on the bias, which is attached to the garment neckline so that it can be shaped to match the curve of the edge it will be applied to. After a facing is attached to the garment, it is turned to the inside of the garment and should not show on the outside i.e. right side of the garment. (To make bias strip refer steps of construction for the preparation of bias strip)

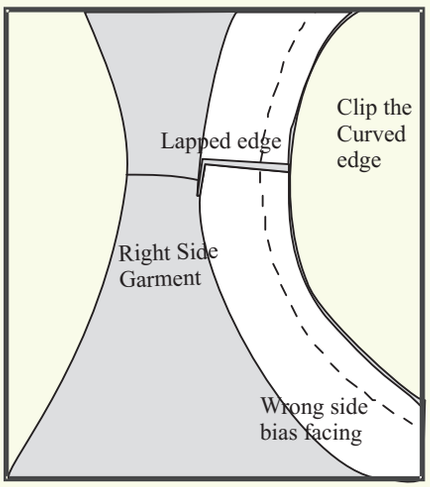
The finished width of bias facing should not be more than ½".

Steps Of Construction

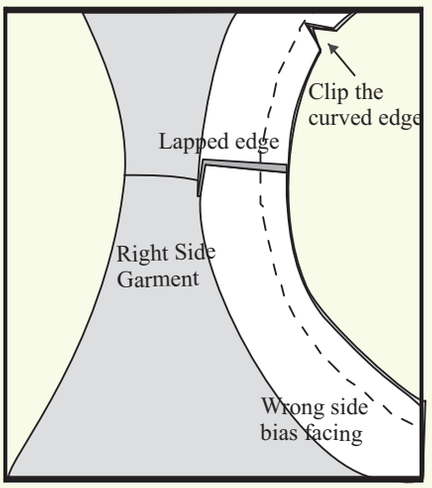
- Face right side of bias strip to the right side of the garment neckline. When applying the binding, fold back the starting end ½" and align the fold with the garment seam line. Pin binding in place and stitch to within 3" of starting point.
- Trim away excess binding at this end to ½" beyond fold of starting end. Lap this end over the beginning fold and stitch the rest of the way across, through all thicknesses. When the binding as turned, the end folded first will be on top; stitch or slip stitch it with the other end.
- Clip the curved seam allowance.
- Open the facing away from the garment Press all seam allowances towards the facing. To keep facing from rolling to outside of garments, the seam should be under stitched with facing and seam allowance extended away from garment. Stitch from right side close to neck seam line, through facing and seam allowance.
- Turn the other edge of the facing towards its wrong side. Press and slip stitch.



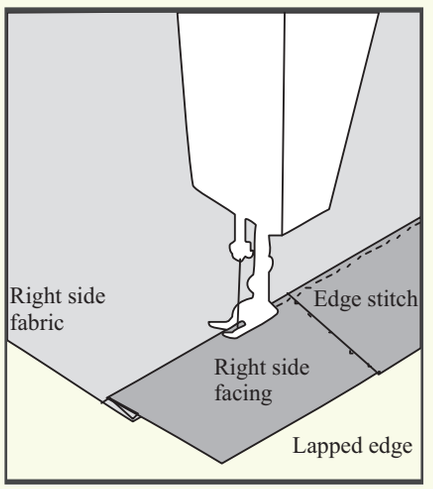
Step -1



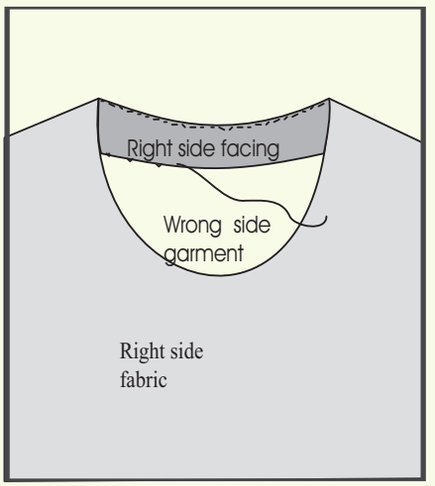
Step -2



Step -3



Step -4



Step -5

4.4.5 Neck Line Finished With Shaped Facing

A neck line shape which is finished with shaped facing i.e. instead of finishing raw edges of fabric at neckline with bias strip as used earlier, it is finished with a facing which is of the same shape as the neckline.

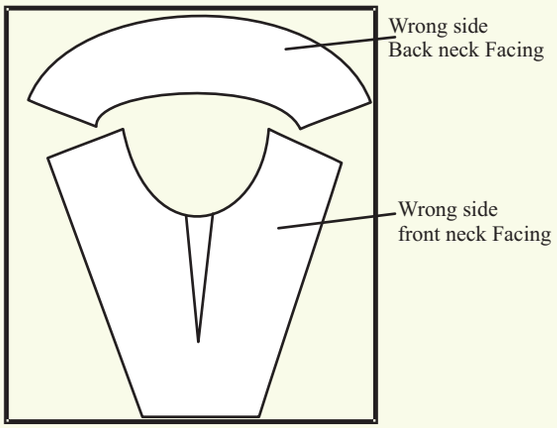
Steps of Construction

- Interface the wrong side of the facing of both front back.
- With right side together and the markings on matched seam, the front facing sections to the back facing sections at shoulders. Press seam flat as stitched then open.

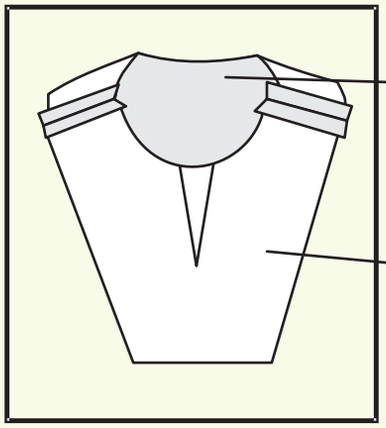
- Keeping seam allowances open, tailor edge finish the facing by turning under 1/8" press. Stitch close to folded edge.
- Right side together, matching, notches, markings and seam lines, pin facing to neck and machine.
- Trim diagonally across cross seam allowances at shoulders. Clip curved seams, also slash the opening at front neckline and clip the corners.
- Place seam wrong side up, using the tip of the iron press seam open.
- Turn facing to inside of garment, allowing seam line to roll inside slightly, now top stitch at a distance of ¼".

Steps of Construction

Preparation of facing



Step -1



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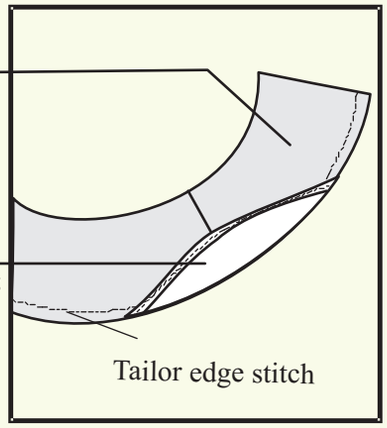
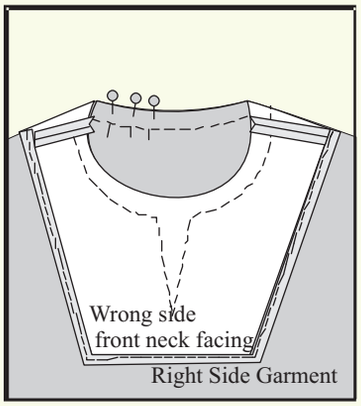
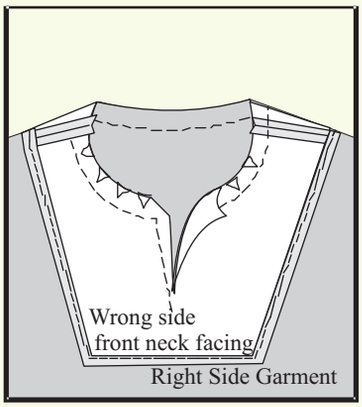


Step -3

Steps of Construction

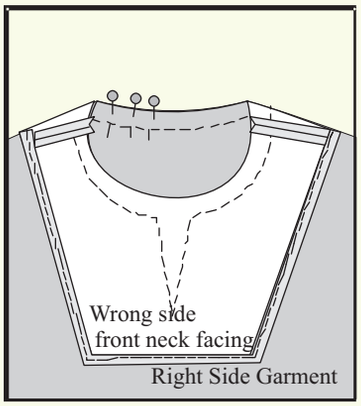


Step -4



Step -5

Steps of Construction



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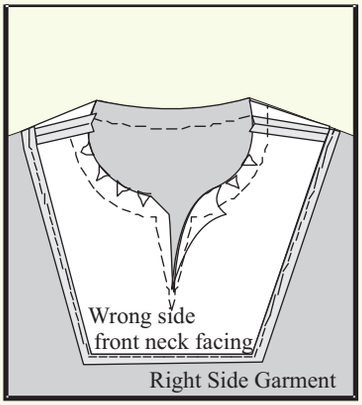
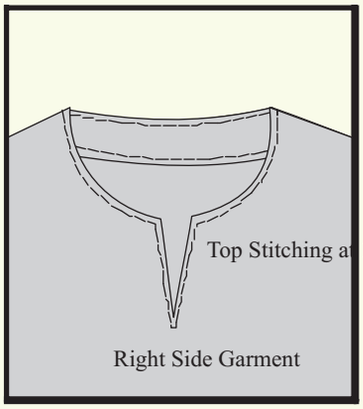


Step -5



Step -6

Activity

Collect picture of garments with different kinds of necklines, identify the finishing used. Please them in your folder.

Fill in the blanks

1. The neckline can be finished by _____ & _____ facing.
2. A sari blouse is finished by _____ which is very rarely seen in garments in western countries.
3. A true bias can be found by _____ the fabric in _____ .
4. Shaped facing is cut from _____ the pattern on the _____ _____which needs to be finished.
5. Bias binding may be _____, specially _____, or _____ prepared.

Review Questions

1. What is the function of a Placket in a garment? What are the factors to be kept in mind while selecting a placket opening?
2. What is a French Placket?

4.5 Sleeve Attachment

Garments today are designed with a wide variety of sleeves, which add greatly to the look and the method of construction. A garment for example, may have armholes that are merely finished, producing a sleeveless look or it may have sleeves, either set-in or raglan that are separately made and attached to the garment. Another possibility is that kimono sleeves are cut as extensions of the main bodice.

The armscyes on most sleeveless garments are cut to comfortably encircle the arm with upper edge resting at shoulder point. Garments are sometimes designed with wider than usual shoulder widths that drop over the shoulder to create a little cap. Others are styled with narrow shoulder width's that results in a larger and more angled armhole, and something of a halter effect.

Set-in sleeves are the most widely used type. As the name implies, this sleeve is actually set into the armhole edge or cap, may be slightly rounded or fully gathered, the length long or short, the bottom tapered, flared or gathered to the armscye the standard round armhole in sleeves is designed with a slightly rounded cap. Ideally sleeves should fall in a smooth curve from the shoulder edge with no dimpling or puckering. To achieve this, the sleeve cap curvature must be carefully eased into the armscye.

To achieve success with any garment, whether it is sleeveless or made with sleeves, it is wise to observe several principles.

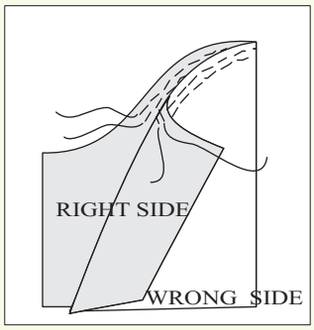
- Check garment and sleeve fit and alter the pattern accordingly.
- Carefully and accurately transfer all sleeve and armhole markings to the final fabric.
- Use proper growing techniques during construction.
- Whenever possible, finish the lower edge of the sleeve before attaching it to the garment.

4.5.1 Steps of Construction of sleeve

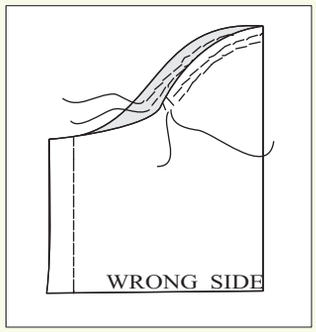
- Place two rows of stitching on the cap of the sleeve 1/8" away from the stitching line. The distance between the two lines will be 1/4". Take care that the stitch size should be more than the usual one. Leave long threads at the starting & end of both the seams.
- Face right side to the right side and stitch at the side of the sleeve.
- Pull the threads and insert the sleeve inside the armhole of the bodice. Adjust

thez size of the sleeve cap by pulling and releasing the thread. Put pins in position.

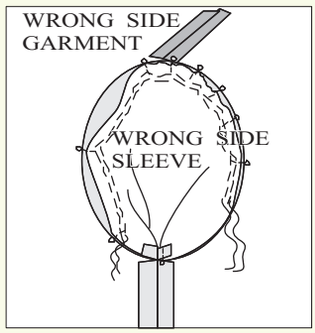
- Stitch the sleeve to the armhole.



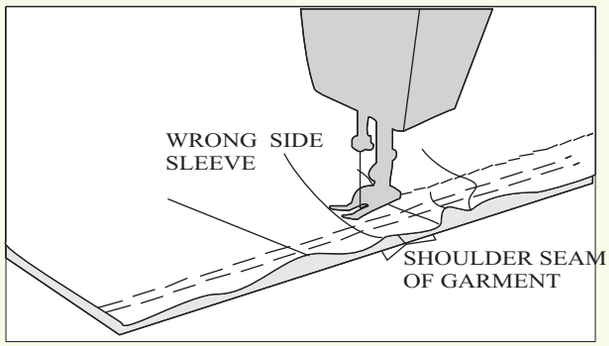
STEP-1



STEP-2



STEP-3



STEP-4

4.5.2 Cuffs

Cuffs actually consist of a cuff and a facing section, which may be cut all in one or may be in two pieces. Before starting cuff application, apply the type of placket, which is required for that particular sleeve and then complete the underarm sleeve seam. Prepare pleats or gathers at sleeve edge if any. Note the placement of the cuff end to placket edge.

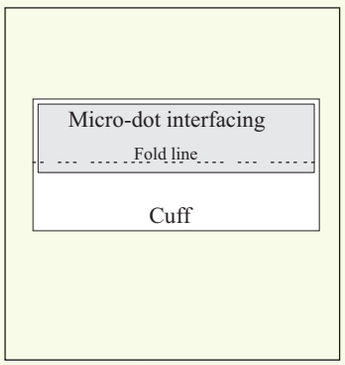
One Piece Straight Cuff

Pattern Pieces (for sample)

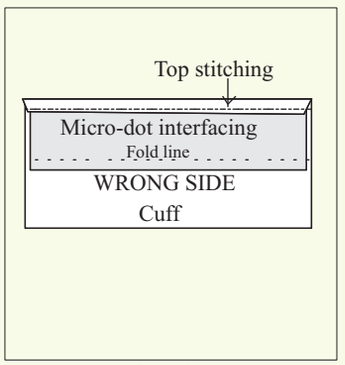
1. One piece of upper and under cuff each.
2. Micro-dot interfacing for cuff.
3. Sleeve on which cuff will be applied along with sleeve placket.

Steps of Construction

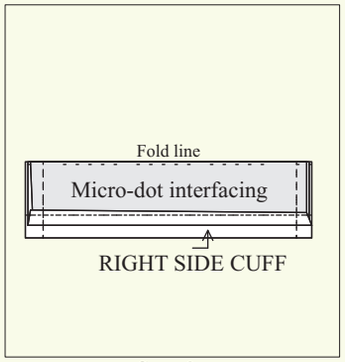
1. Fuse the wrong side of the upper cuff to interfacing, which can come to fold line or can be extended half inch beyond the fold line.
2. Turn the seam allowance of the upper cuff to the wrong side of the cuff and give top stitch at a distance of ¼" or ¾" as required.
3. Fold along fold line right side facing each other and pin the two ends from wrong side, stitch at a distance of half inch from both the sides. Chop off extra seam allowance near the edges.
4. Turn inside out and pull the corners.
5. Face wrong side of the sleeve to the right side of the under cuff, machine stitch in place.
6. Insert all the seam allowance into the cuff. Start machining at the edge, from the right side of the upper cuff on to the right side of the sleeve.
7. Optional top stitch at a distance of ¼" all around the cuff edges.



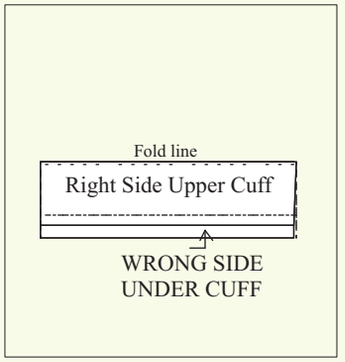
Step-1



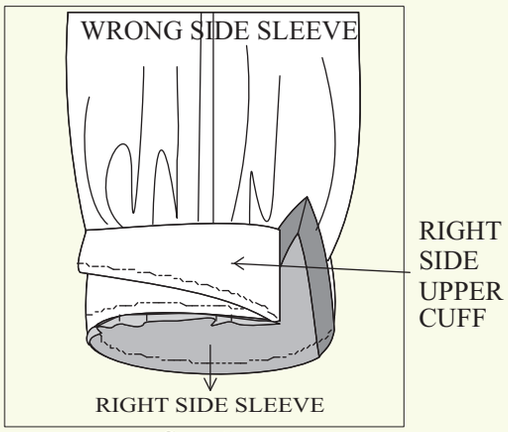
Step-2



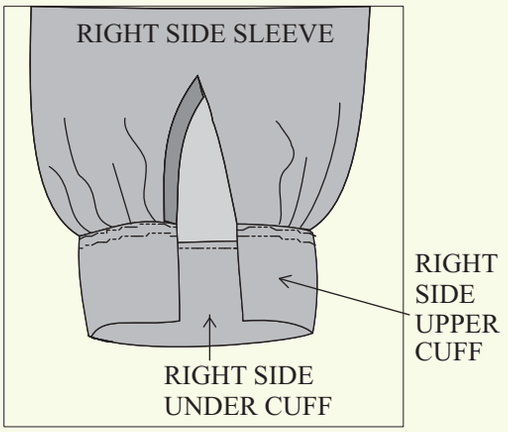
Step-3



Step-4



Step-5



Step-6

Activity

Collect pictures of garments with different kinds of sleeves. Place them in your folder.

Fill in the blanks

1. The sleeve _____ is attached to the armhole of the bodice by _____ gathering to ensure that edges meet.
2. A sleeve_____ is finished by gathering it to the armhole_____ to give it _____.
3. Place _____ _____ of stitching on the cap of the sleeve _____away from the _____ line.
4. The distance between the two seam lines will be _____.

Review Questions

1. Name 5 kinds of Sleeves.
2. Differentiate between Raglan and Kimono sleeve?