

Fitted & Flattered - Basic Bodice Construction

Illinois State Square & Round Dance Convention July 2019

Taught by Karen Dilley

Let's start out with a few questions:

1. Why do we wear what we do for Square Dancing?
2. Do you wear the same size now that you did at age 25?
3. When square dancing was at its zenith, did the women dress the way we do?
4. Have square dance clothing styles evolved since its zenith? For the better?

From what I have observed, the majority of women today are wearing prairie skirts (with elastic waists) and peasant blouses. Why? Is the prairie skirt flattering to you? Is the peasant blouse flattering to you?

Hopefully, this class will give you the tools to make dress bodices or blouses that flatter you. I am also hopeful that this class will encourage you to explore designs outside your comfort zone.

Taking into consideration, your age, your body shape, proportions, and your height, you need to figure out what flatters and what doesn't. Fit is a major component in how flattering a garment will be on you, but you also need to keep in mind fabric type & color.

My main resources for this course are "The Palmer/Pletsch Complete Guide To Fitting" and the Curvy Sewing Collective <https://curvysewingcollective.com/curvy-tutorials>. Some of the pages in this document have been copied or paraphrased. I encourage you to find and follow these resources.

What Size Pattern Should I Buy?

Today's patterns are based on these measurements:

Size	4	6	8	10	12	14	16	18	20	22	24	26
Bust	29.5	30.5	30.5	32.5	34	36	38	40	42	44	46	48
Waist	22	23	24	25	26.5	28	30	32	34	37	39	41.5
Hip	31.5	32.5	33.5	34.5	36	38	40	42	44	46	48	50

I've indicated the Bust measurement in **red**, because this is the most critical measurement when purchasing a pattern for bodice construction. I'm not talking about the full bust measurement, rather I refer to the high bust measurement. How to measure the high bust:

- **High Bust:** Measure around the body, above the **bust**, across the widest part of the back and under the arms.



- Measure over the underwear you plan to wear with your garment. The bra style you wear is important because your bust fullness and position can change with different bras.
- Measure, making sure your fingers are not under the tape. This is a snug, SKIN measurement
- To get the proper fit in the neck & chest area, take a snug high bust measurement instead of the full bust to determine your size. Take it below your shoulder blades in the back and above your breasts in the front. Compare it to the bust measurements on the pattern envelope.
- If you are between sizes, purchase the smaller size.
- Cup size is not relevant at the time of pattern selection. Pattern companies typically size patterns for a B cup, unless it is marked otherwise. Patterns used to nearly all be drafted for a B-cup, meaning a woman whose difference between her high bust and full bust is 2 inches. Thankfully for many of us with larger busts, in recent years, some pattern brands have been expanding beyond drafting for a B-cup.

Subtract your high bust from your full bust, and use the difference to figure out your cup size:

- 1" = A cup
- 2" = B cup
- 3" = C cup
- 4" = D cup
- 5" = DD cup
- 6" = DDD cup

Make a Body Graph


A body graph is a quick, fun and simple way to identify your shape and proportions regardless of your height.

You can't do this alone! My husband, Bruce, was kind enough to help me. But, it is actually best to do this in a group of 3 or 4. One person creates the vertical center line and later stands back to insure that the person holding the ruler is holding it straight, one person to hold the ruler and one to mark the graph points.


Preparation

1. Cut newsprint or butcher paper wider and taller than you are. (Tape two widths together if the paper is too narrow.) Fold it in half lengthwise and crease. Mark the foldline using a pen and yardstick.

QUICK TIP:
Use the gridded tissue called Perfect Pattern Paper for McCall's.



2. Wear nonbinding underwear or leotard and no shoes. Tie elastic around your waist and wear a chain necklace to mark the base of your neck.
3. Tape the paper to a wall. Cut or crease the paper even with an uncarpeted floor.
4. Stand with your back against the paper in normal posture, centering your body along the vertical crease. Mark the top of head and crotch first to make sure you are centered on the fold. Look straight ahead. **DO NOT LOOK UP OR DOWN!**
5. Have a friend plot the points shown in the illustration below, using a new, long pencil and a non-flexing yardstick. Have her keep the yardstick close to your body, holding the opposite end so the entire yardstick is perpendicular to the wall. Then have her mark the paper at the edge of the yardstick that is next to your body.



Top of head (not top of hair).
Mark on center line of paper

Base of neck (where necklace sits).
Mark both sides. (Marks may not be at the same level.)

Shoulder (in the middle of pivot bone or at the top of a well fitting, smooth, set-in sleeve cap).

Waist. (Mark the bottom of the elastic on both sides. The marks may not be at the same level.)

Fullest area below the waist
(not always the "hip").

Crotch. (This allows you to measure hips from center on both sides to see if hip is fuller on one side. Be sure mark is on center line of paper.)

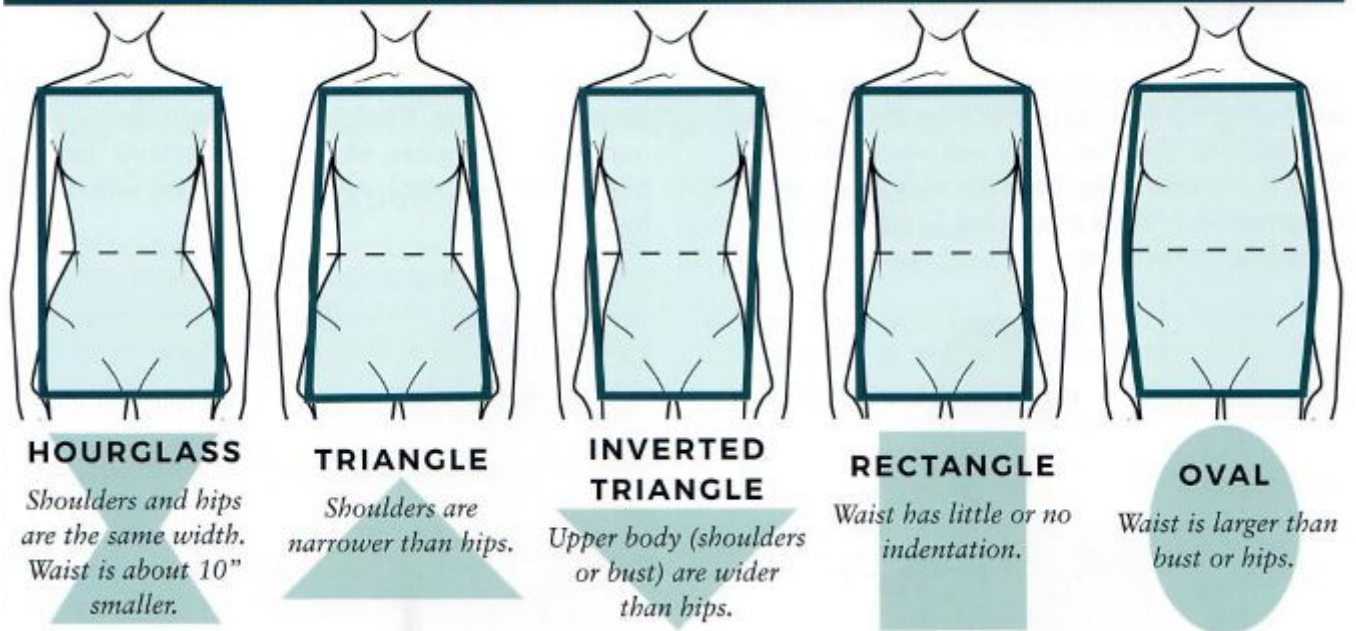
Bottom of head. (Turn head sideways, mouth closed and head straight—not tilted up or down.)
Mark just under chin.)

Underarm. (Raise arm to find spot. Lower arm to mark spot.)

Hip (where leg is joined to hip bone). The left and right may be different heights.

Knee (where it creases in back).

THERE ARE FIVE COMMON CATEGORIES OF SHAPE.
MOST WOMEN ARE ONE OF THE FOLLOWING:



Most of us can look at the illustrations above and pick ourselves out. But we often have very distorted or outdated images of our own bodies. The Body Graph will help you put a more realistic picture in your mind.

In analyzing my body graph my shoulder width is 15" and my hips are 14". So technically, I fit the definition of an inverted triangle (but just barely). I'm also close to an hourglass, but my waist isn't as small as it used to be!

I also learned that compared to the "Perfect Proportions" shown below, I have wide and sloping shoulders. This explains why I can't keep traditional bra straps on my shoulders. It also explains why I like cut away shoulders in my dresses. I use a size 12 for my bodice construction. Based on the proportions below, my shoulder width should be 4.25". Mine are 5.5" wide! My shoulder slope should be 1.625". On my right side the slope measurers 2.5" and on the left, it measures 2.0". So, I'm lopsided with wide sloping shoulders.

NOW COMPARE YOURSELF TO "PERFECT" PROPORTIONS

Although no one is perfect, you have to start somewhere to have a point of comparison.

"IDEAL" PROPORTIONS

Width from neck base dot out to shoulder dot is $4\frac{1}{4}$ " for a size 10, up to $5\frac{1}{4}$ " for size 20. See note below.

Shoulders slope $1\frac{1}{8}$ " from neck base if you are a size 10, up to 2" for a size 20. See page 195.

Underarm is halfway between top of head and hip.

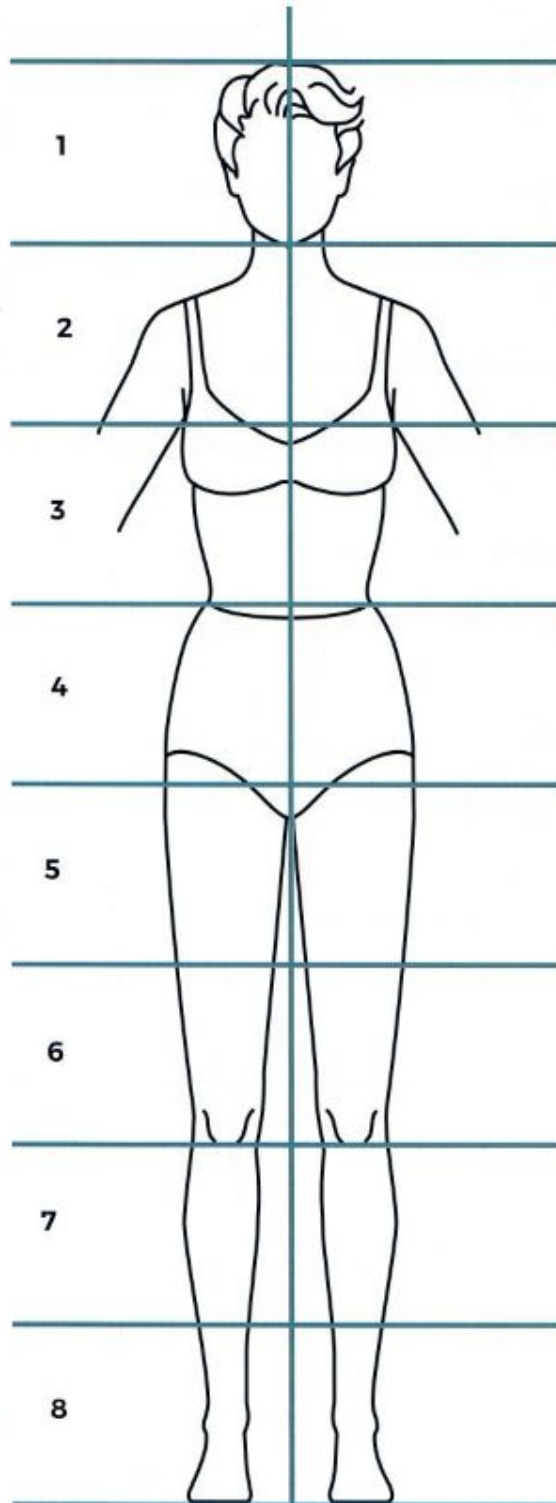
Waist is halfway between underarm and hip.

Hip where leg is joined divides body in half.

Hips are 1" narrower than shoulders for garments to fall freely over hips

Knee is halfway between hip and feet.

NOTE: Measurements are based on pattern company basic patterns.



POSSIBLE VARIATIONS

If your shoulders slope $\frac{1}{2}$ " more or less than the ideal, you are sloping or square.

NOTE: If your shoulders are uneven, the one that slopes more will measure longer. This doesn't necessarily mean it is broader.

If your waist is more than 1" above or below the ideal, you are short- or long-waisted for your height.

If your leg length is more than 1" longer or shorter than half your body length, you are long or short-legged.



Having learned this, how does this change how I alter a pattern to fit me.

1. I will need to change the slope of the shoulder line if I want the dress bodice to stay on my shoulders and not to create excess fabric from the underarm to the shoulder blades.
2. I **may or may not** need to change the side seam lengths, the left shorter than the right. I say may, because the left shoulder is higher than the right, so the length **may** end up being the same.

There are other important points I could take from the body graph if I was making pants or a dress (without a full skirt).

Altering a Tissue or Muslin Pattern to Fit You

1. Trace the pattern size indicated by your high bust measurement. I've tried muslin and I've tried Pellon 830 Easy Pattern (available at JoAnn Fabrics). I prefer the Pellon 830. Make sure to include grainlines.
2. Cut out the pattern and machine baste it together exactly as the pattern indicates.
3. Try on the tissue garment. Unless you are extremely unusual, you will have gaps that don't close and/or places that the pattern is too large and key fitting points won't be where they should be.

Fit Principles Summarized

- The bigger the bumps, the more length and width they need and deeper the darts must be.
 - Wrinkles point to the problem.
 - Use the "T" principle. Crosswise grainline at bust and hips as well as hems should be parallel to the floor. Lengthwise grainline and side seams should be perpendicular to the floor.
 - Leveling is done from where the garment hangs on the body, such as at the shoulder or the waist.
4. Release seams or slash tissue where extra room is needed. Fold and pin excess material to achieve a smooth fit.
 5. Once you have achieved a smooth fit, measure gaps where the pattern has been split and spread (while still on the body).
 6. Remove tissue pattern. Add additional tissue where needed and correct the grainline. Cut away additional tissue if you need to remove excess at the seams. Often, you will need to add and/or decrease the same seam allowance. An example in my case is that I need to reduce the center back seam at my neckline, but add to it at the center back and sometimes at the waist line.

7. Try on the garment again and repeat the process. Once you are happy with the fit, you can use this tissue as your pattern pieces when cutting out your fabric.
8. I suggest basting the garment together to insure that you have a good fit. You can still make minor alterations on the final garment and it is a lot easier if you have only based the seams.
9. If you are satisfied with the fit, do you final stitching.

Full Bust Adjustment

Preparations:



To get started we're going to need a few materials.

- Your pattern! Instead of using the original tissue pattern, I highly recommend tracing your pattern onto a more durable type of paper. Tissue paper is just too

flimsy to handle that workmanship! Besides, if you end up wanting to change the fit, it's nice to not have irrevocably messed up the original bodice.

- A clear ruler!
- Pattern weights! I use large metal washers, which are both weighty and have slim profiles that make cutting around them a breeze.
- A sharpie or pen!
- Scissors!
- Tape!

When you trace off your pattern, be sure to transfer all pattern markings, especially your horizontal lengthen/shorten line and the pattern's bust apex. We'll be using both of those markings to make our cuts in the pattern.

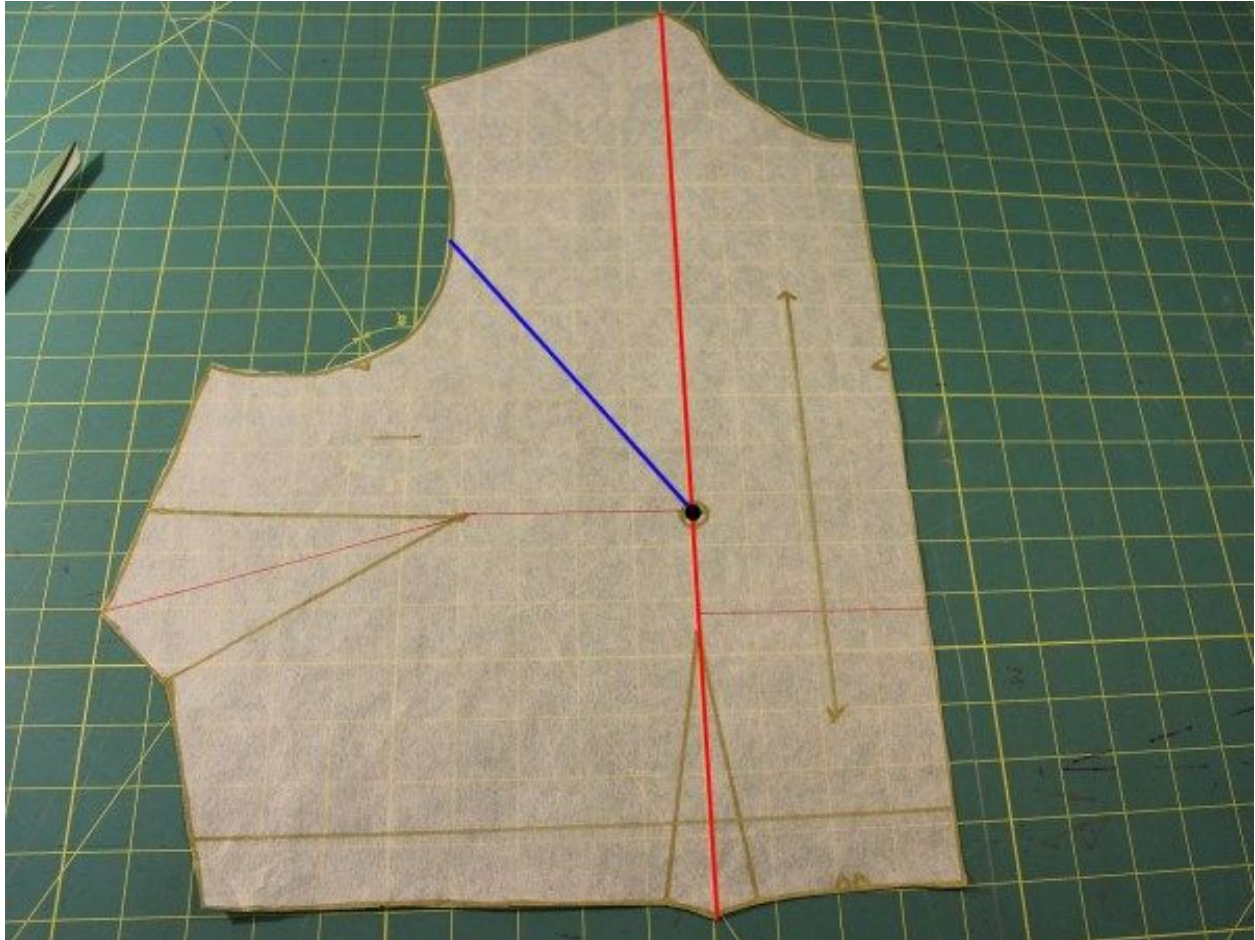
Step One:

The goal of an FBA is to add fullness to your pattern piece, without sacrificing the fit at your shoulders and waist. To do that, we're going to draw a few lines on our pattern, then cut them to specific points, so that the piece only gets larger where we want!



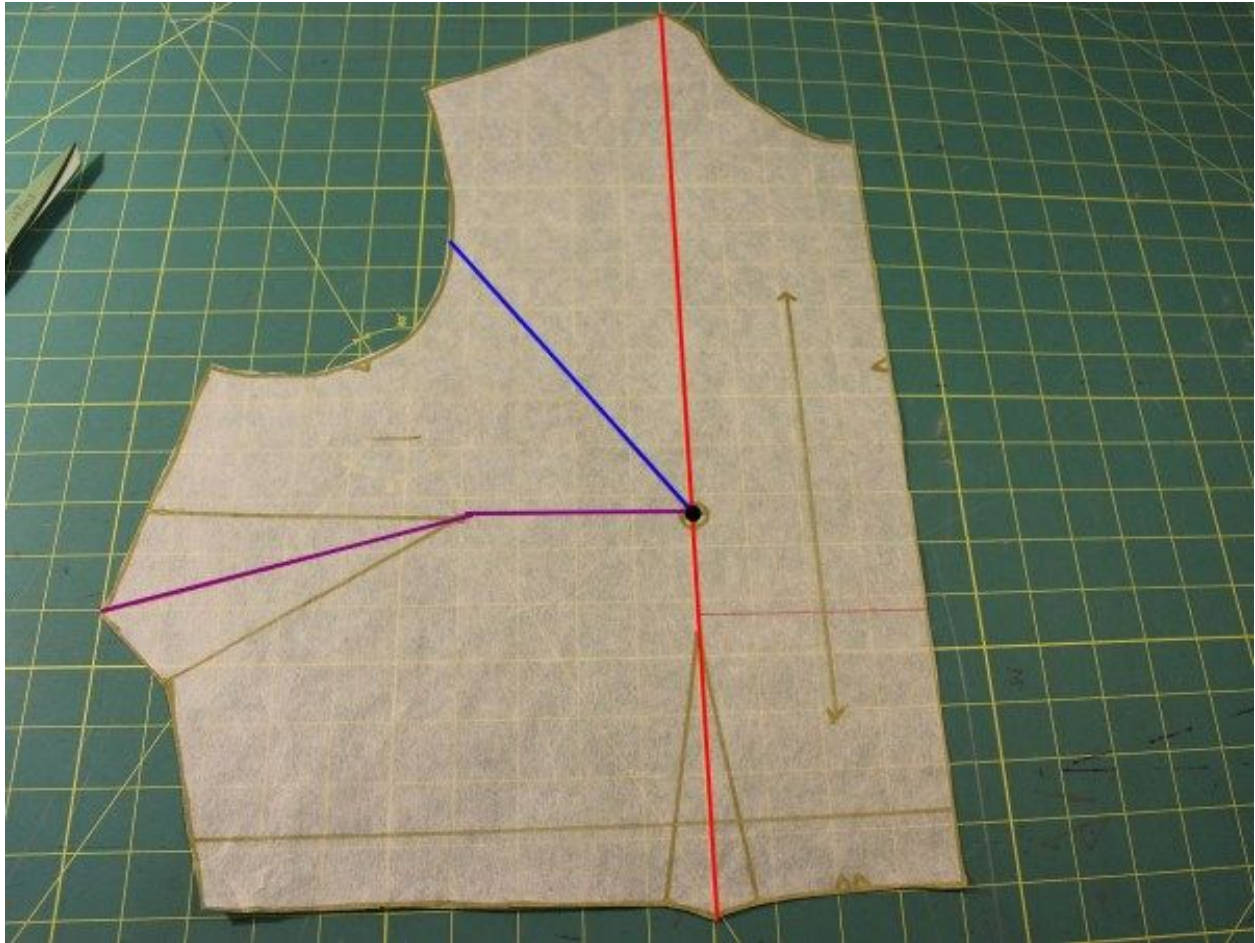
First off, draw a straight line through the middle of your waist dart (that one on the bottom) up to the pattern's shoulder, through the bust apex point. Above, you'll see my black bust apex and this first line in bold, bright red.

Step Two:



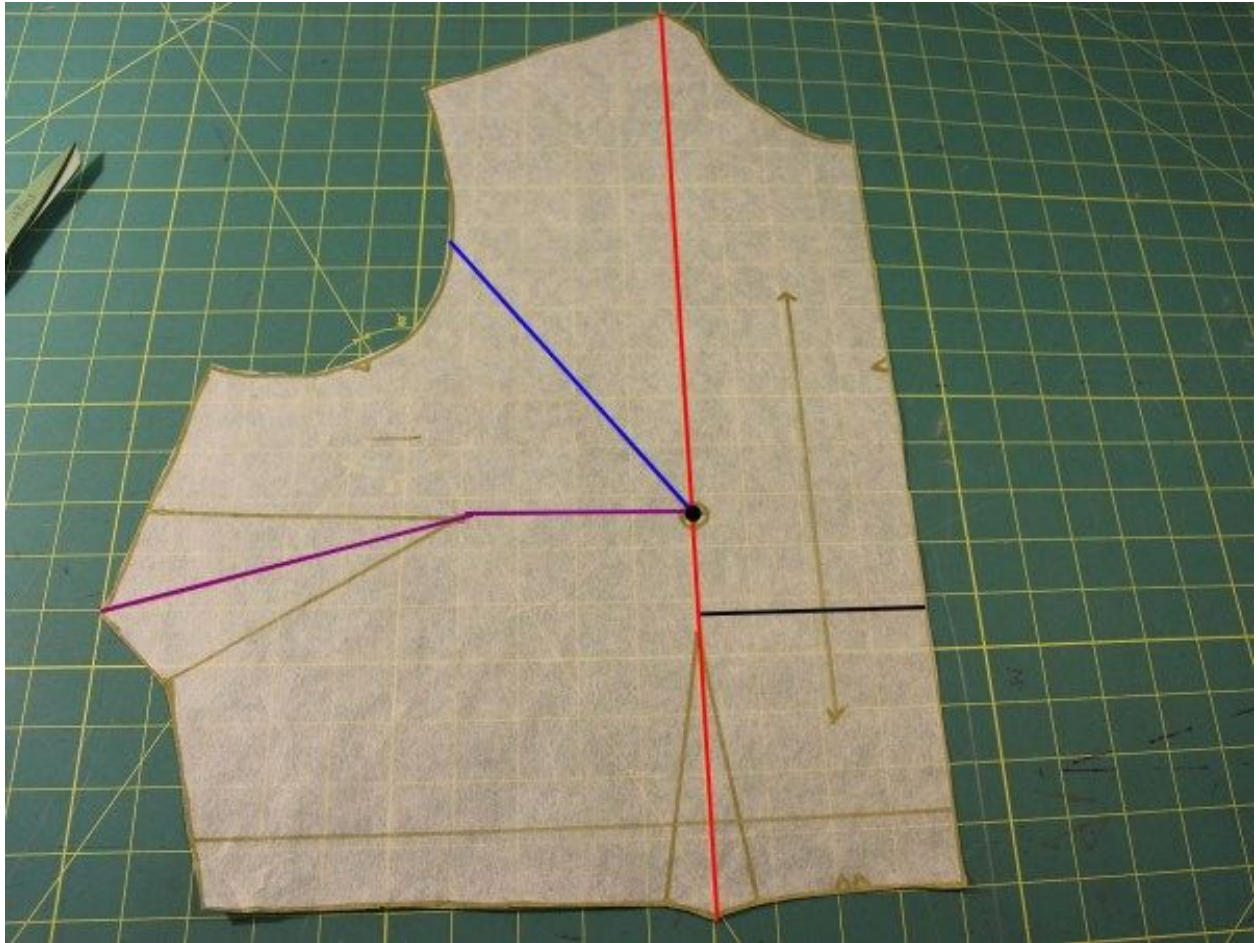
Now, draw Line #2 from your bust point out to your armhole, about 1/3 of the way down from the shoulder. (Show above in bright blue.) The reason we only go 1/3 of the way down the armhole is to prevent over-distortion of our armhole, which would give us too much blousing on the side.

Step Three:



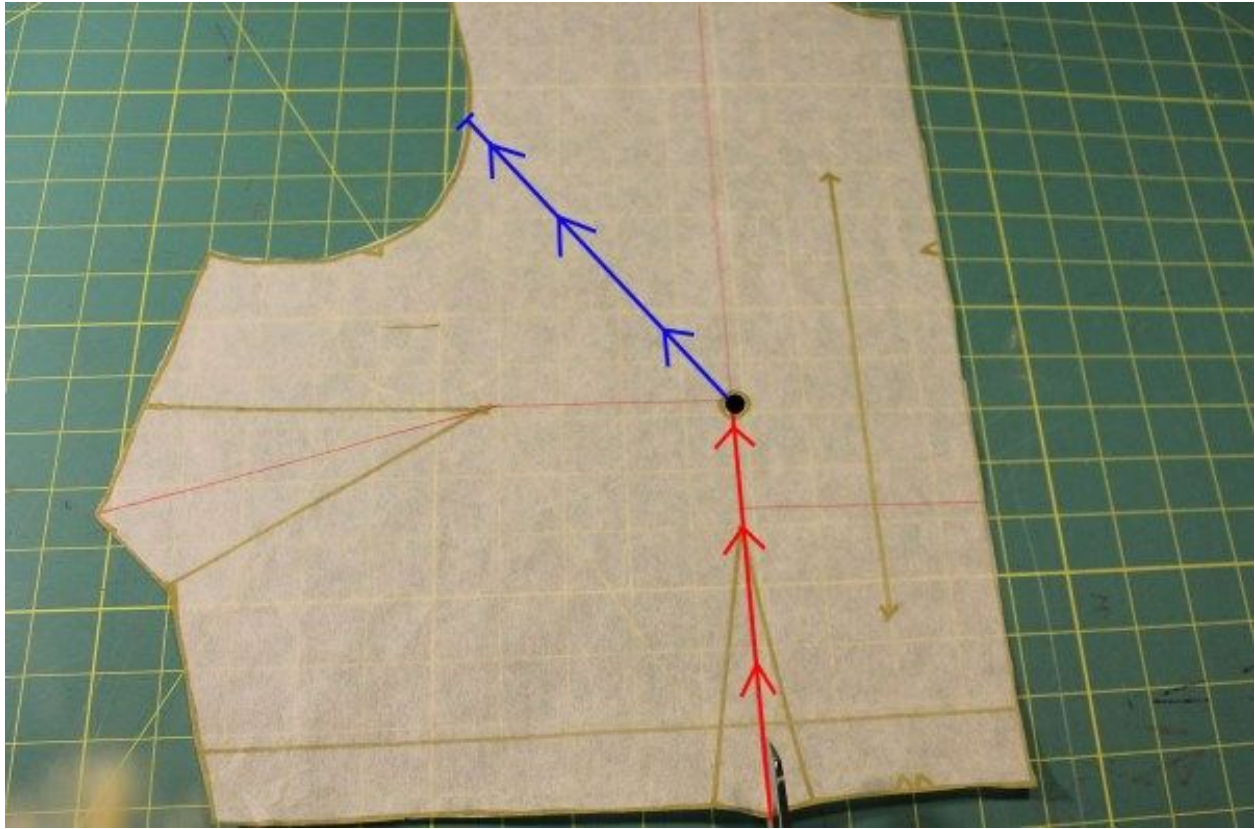
Next up, we're going to draw a line through our side bust dart to the bust apex. There are two main types of side bust darts you'll encounter: those positioned horizontally to an apex and those which angle up. For both types of dart, we draw Line #3 from the middle dart edge, through the dart tip, over to the bust point. If you're working with a horizontal dart, this will be a perfectly straight line. If you have an angled dart, there will be a hinge in your line like my purple one above.

Step Four:



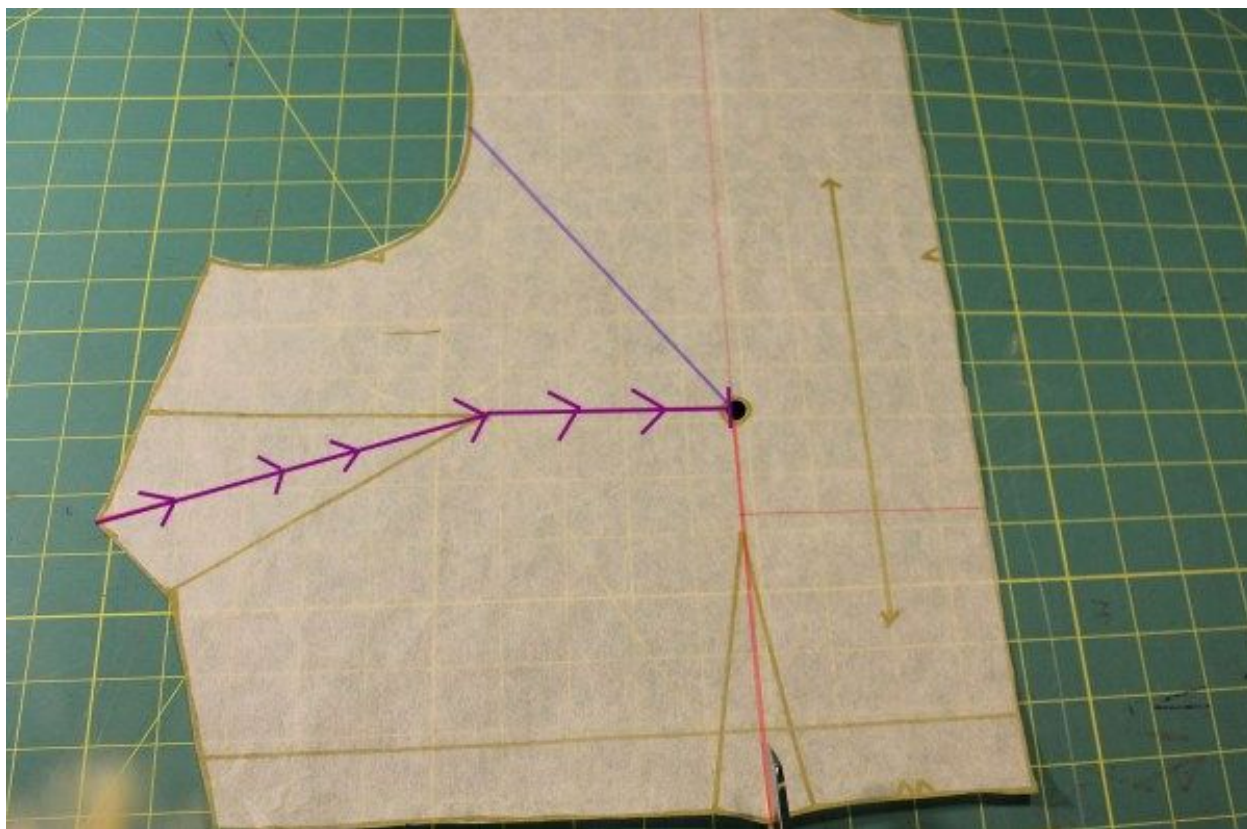
The final line we're going to draw is an easy one. From your center front, draw a straight horizontal line to Line #1, just above where your waist dart ends. I've done this in black above!

Step Five:



For our first cut, we're going to go up through Line #1 to the bust point, then pivot right there and continue along Line # 2 to your armscye. At the end of Line #2, stop cutting *just before* the line ends, leaving a small bit of line left intact (*about 1/8 inch*). We don't want to cut our pattern piece in two, just make it mobile enough that we can spread it out a bit. Leaving this little bit left gives us a "hinge," to move the bodice around.

Step Six:



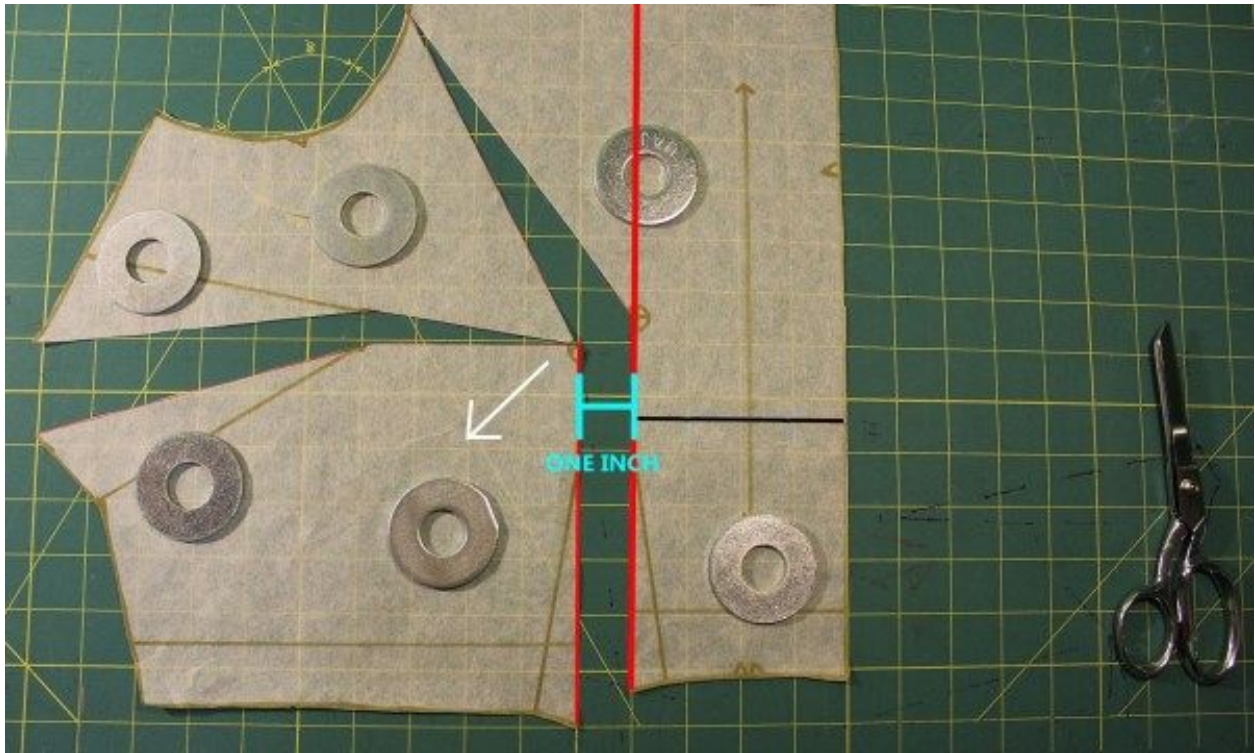
For our next cut, we're going to cut along Line #3, starting at the dart side and stopping again *just before* the bust apex, leaving another hinge. See how you can now spread your bodice pieces out quite a bit? The step below shows our new pattern piece, complete with hinges and cuts!

Brief Interlude of Math

Now that your pattern piece is all hinged, we can add in the fullness needed to compensate for our full bust measurement. How much extra room do you need? Keeping in mind that most patterns assume a B cup, which means the full bust measurement is 2" larger than the bust size given on the pattern, if you are a C cup, you need to add an inch

Since a bodice pattern piece is only *half* of a full bodice, this means I'm making a 1/2-inch FBA. $1 \text{ extra inch needed} \div 2 \text{ bodice halves} = 1/2 \text{ inch FBA}$

Step Seven:

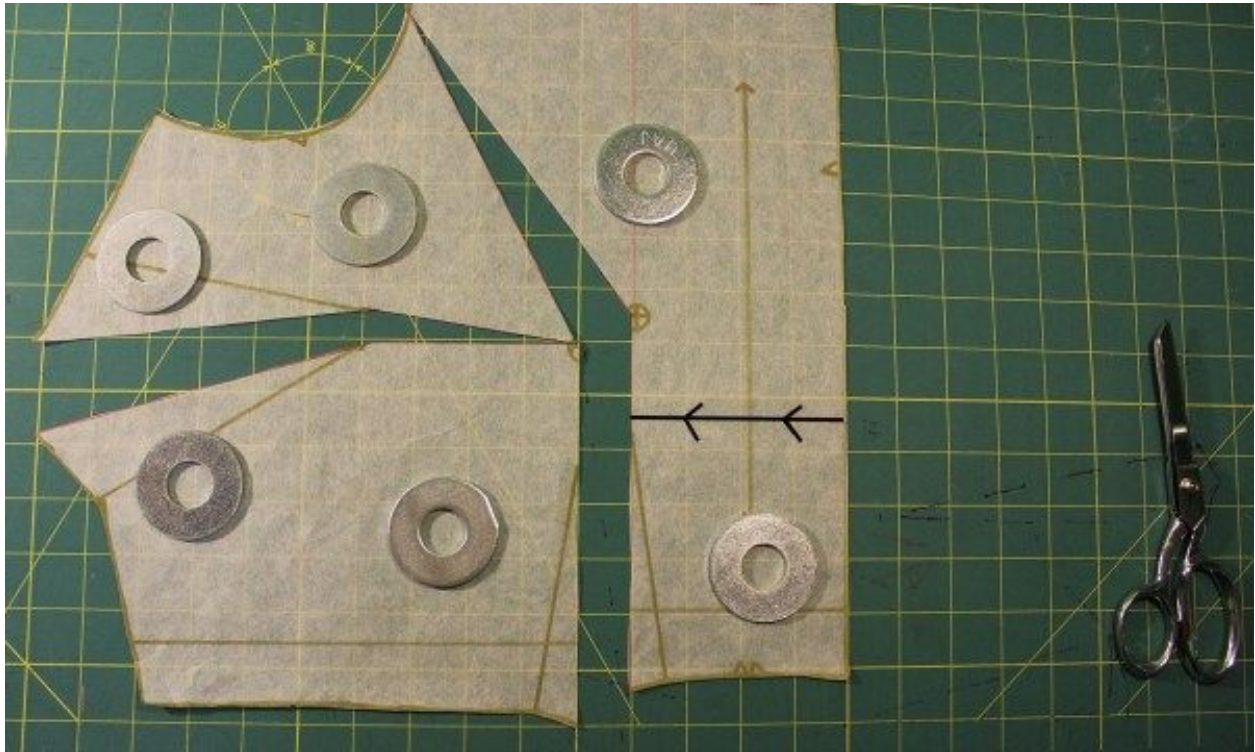


The extra fullness we're adding in gets directly added to Line #1, the bright red one that went up from our waist dart. To do this, secure the center front of your pattern piece, then spread your hinged lower bodice down and to the left. Being careful to keep the slash along Line #1 straight, spread your pattern piece out until there is one $\frac{1}{2}$ inch separating the split Line #1.

See how your dart and armhole have also moved to accommodate your new Line #1? That's exactly what we want. Now, make sure every part is laying flat and your split Line #1 is still straight, with an $\frac{1}{2}$ inch separating it all the way down, then put pattern weights all over the place!

**Use the measurement you got from our Math Interlude. If you're doing a 2-inch FBA, spread it 1 inch, and so forth.*

Step Eight:



Now that your pattern piece is slashed and spread, it's time to make our final cut. You know Line #4? Cut clean through it, from the Center Front all the way to the red line, as demonstrated in black above.

Step Nine:



Move that little bodice piece down, until your horizontal lengthen/shorten line is once again even. Secure with a pattern weight!

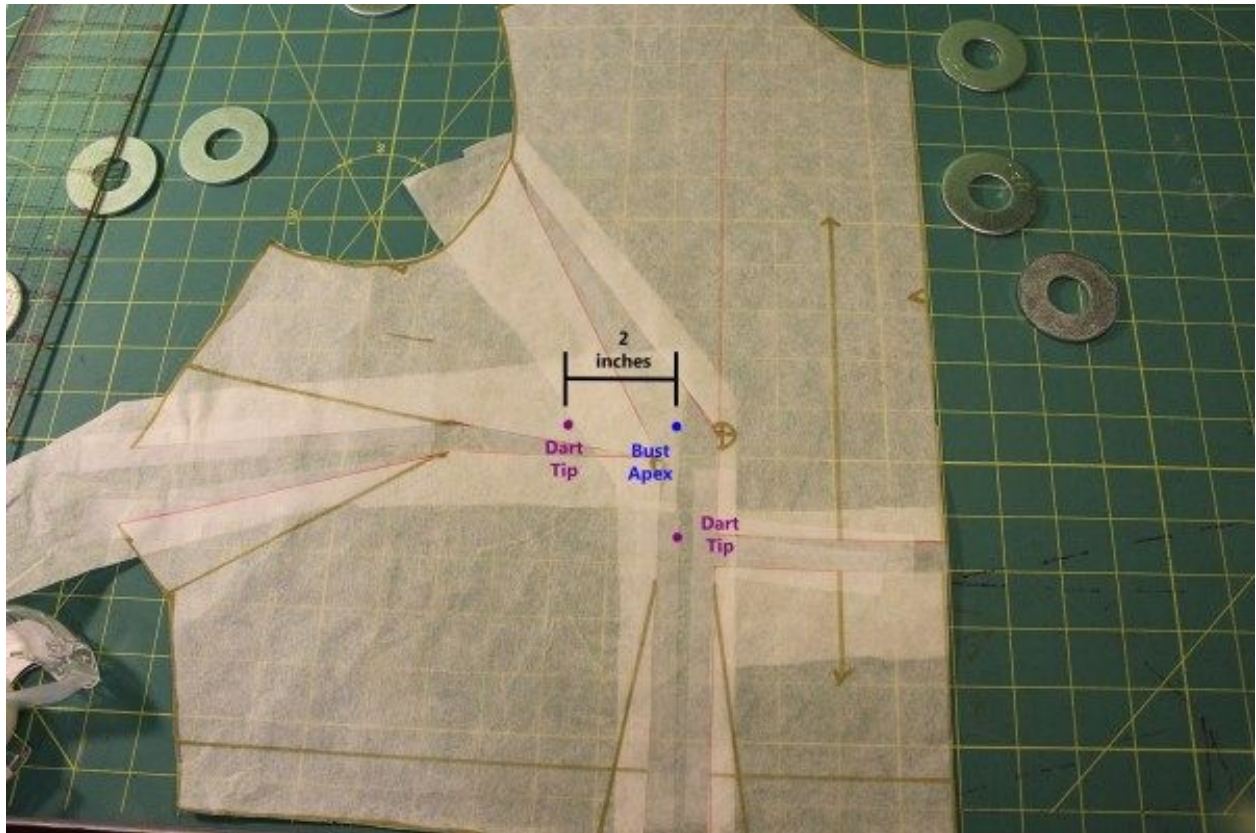
Step Ten:



Very carefully put scrap paper underneath all the holes on your pattern, without shifting it around. Tape this scrap paper down. At each dart, leave extra paper past the pattern's end. We're going to redraw these darts next and will need the extra room!

Step Eleven:

We need to mark *your* bust apex on the new pattern piece. To do this, hold the piece up to yourself and mark the fullest point of your bust on the pattern piece. I've marked my own in blue in the image below.



Now, there are some standard rules with darts that nobody tells you. You definitely don't want these going all the way to your bust apex. That's how dreadful, pointy hideousness happens! The standard rule of thumb is to position the dart tips one inch away from your bust apex. For curvy women, however, this rule doesn't always hold true. If you have a large bosom, your actual bust apex takes up more room. Over time, you will find what works best for you, but for large busts, I like the dart tips to be *two inches* from the apex instead.

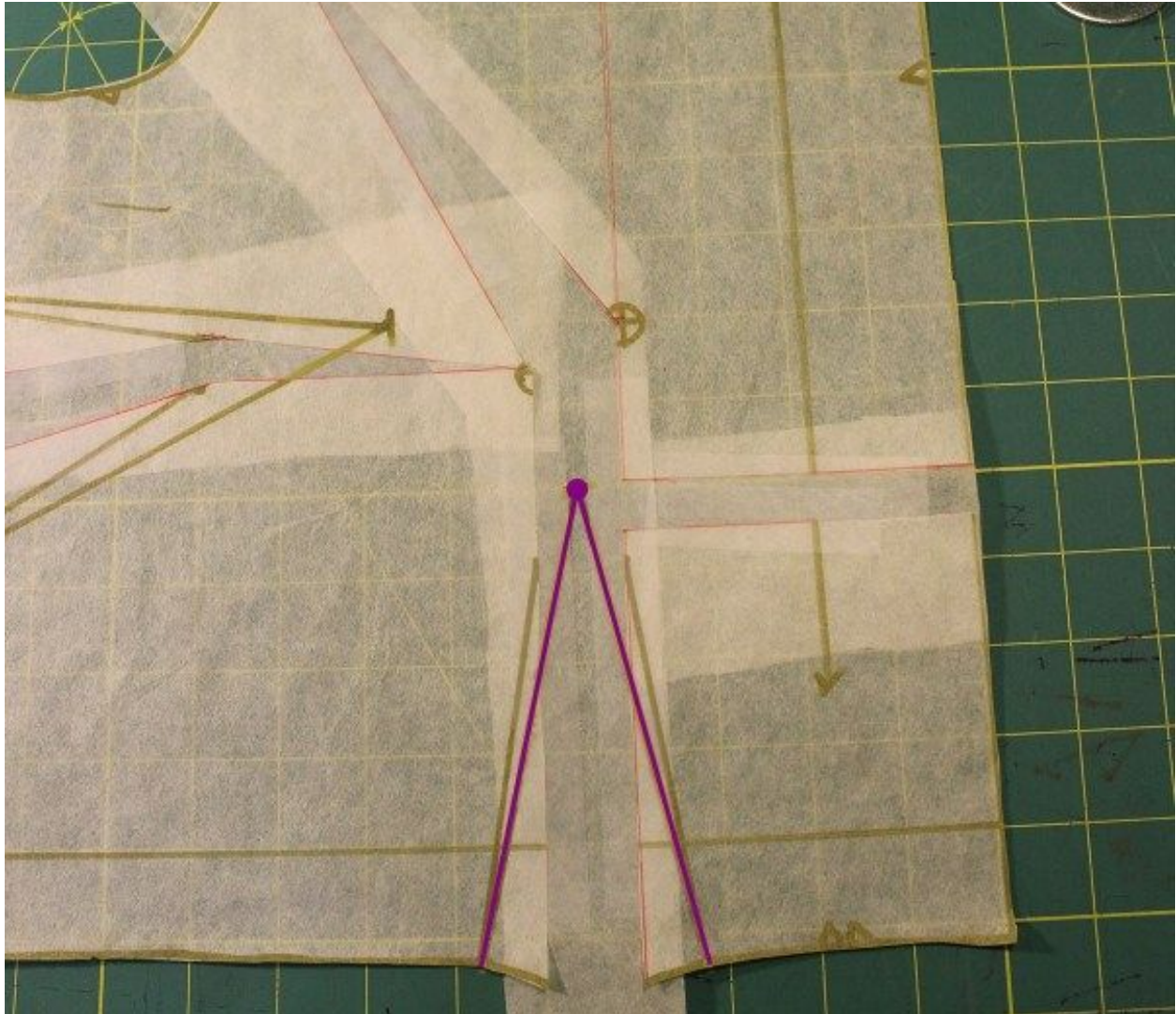
To mark these, measure two inches to the left of your bust apex, then mark that dot for your side bust dart. Then, measure two inches below your bust apex, and mark that dart for your waist dart. I've marked these dots in purple in the above image.

Step Twelve:



It's now time to redraw your side bust dart! To do this, use your ruler and draw two straight lines from the original dart ends, to your new dart tip. I've done this in purple above. *Completely ignore the original dart legs. You're blazing your own path and don't need to follow those! Just go straight to your personal dart tip.*

Step Thirteen:



Repeat the same process for your waist dart. Beginning at your original dart ends, draw two straight lines up to your new dart tip. Once again, completely ignore the fact that you're not following the original dart legs. Those don't matter for your needs.

Step Fourteen:

We're so close to the end! We just need to get rid of all that extra paper.



To do this, fold your new dart legs together, as I have done above on the side bust dart. Once you've folded them together, cut across the end of your pattern piece, noted in black in the above image. Repeat this process for your second dart.

Step Fifteen:



Finally, trim that extra paper along your armhole!

Step Sixteen:

Then, make a muslin of your new bodice and see how you like the fit.

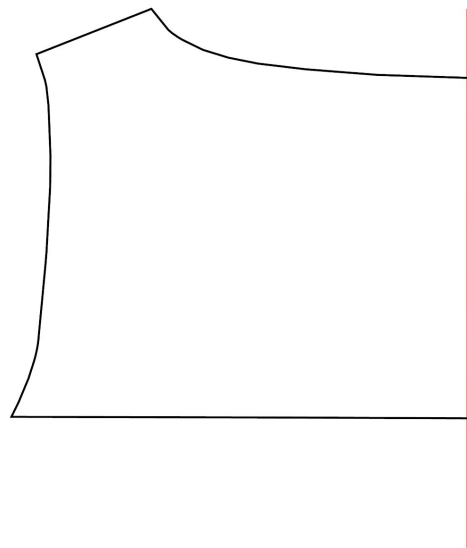
How To Do A High Round Back Adjustment

A common adjustment many of us need to make – especially in this computer & smartphone age – is a high round back adjustment (sometimes rather unfortunately called a “dowagers hump!”).

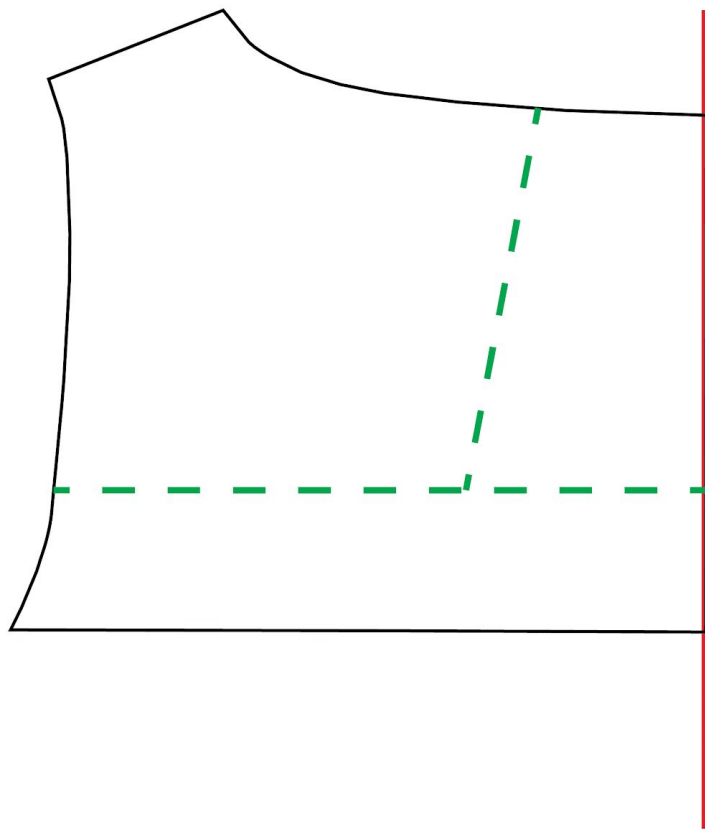
If your back doesn’t go up straight into your neck, but rather curves over a bit, you may have a high round back (the opposite of this is if you have a very upright posture). The key signs that you need this adjustment are a gaping neckline, and potentially a back hem that rides up. The good news is that when you sew, you can adjust for it!

To decide how much length you need to add to the upper back, measure your back from your waist to the back of your neck where a necklace would sit. Now measure the center back length of the pattern (including the lower back and yoke, and excluding the seam allowance). Your back will be longer, so subtract the pattern length from your back length and that’s the amount you need to add. For instance, if your back length is 15” and the pattern is 14”, you need to add 1”.

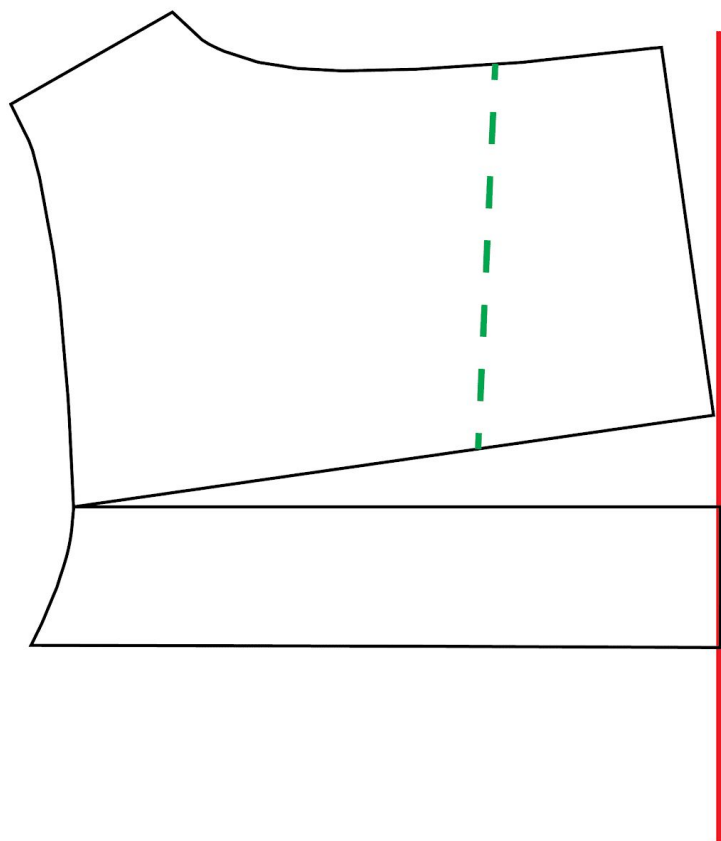
1. Get a piece of paper and tape or secure it to your table. Draw a straight vertical line on your paper (shown in red below), and this will be our center back guide. Place your back piece against this line, with the center back on the guide.



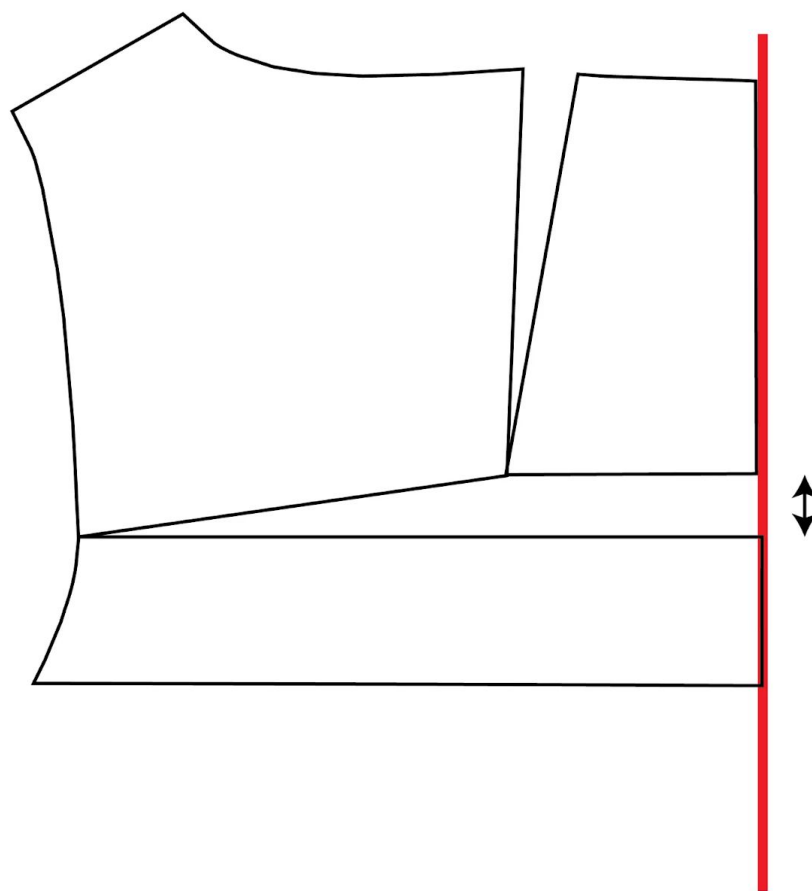
2. Draw two lines onto the yoke. The first one should be about an inch up, parallel to the bottom of the yoke and at a right angle to the center back. The second should go from that line up to the neckline, about 3 inches in, and going at a slight angle – don't worry too much about the exact distance and angle, as long as it resembles this picture it'll be fine.



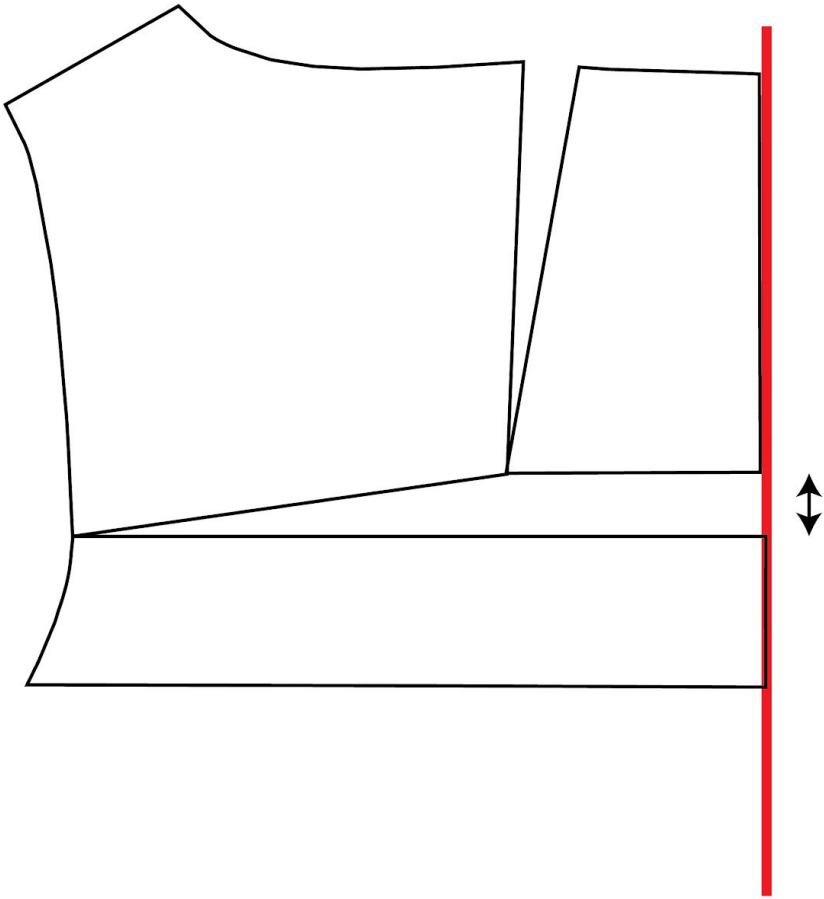
3. Now, carefully cut the first, horizontal line, starting at the center back and going towards the armhole. Just before you get to the armhole, stop, and leave a little hinge there. Move the top part of the yoke up gently, maintaining the paper hinge.



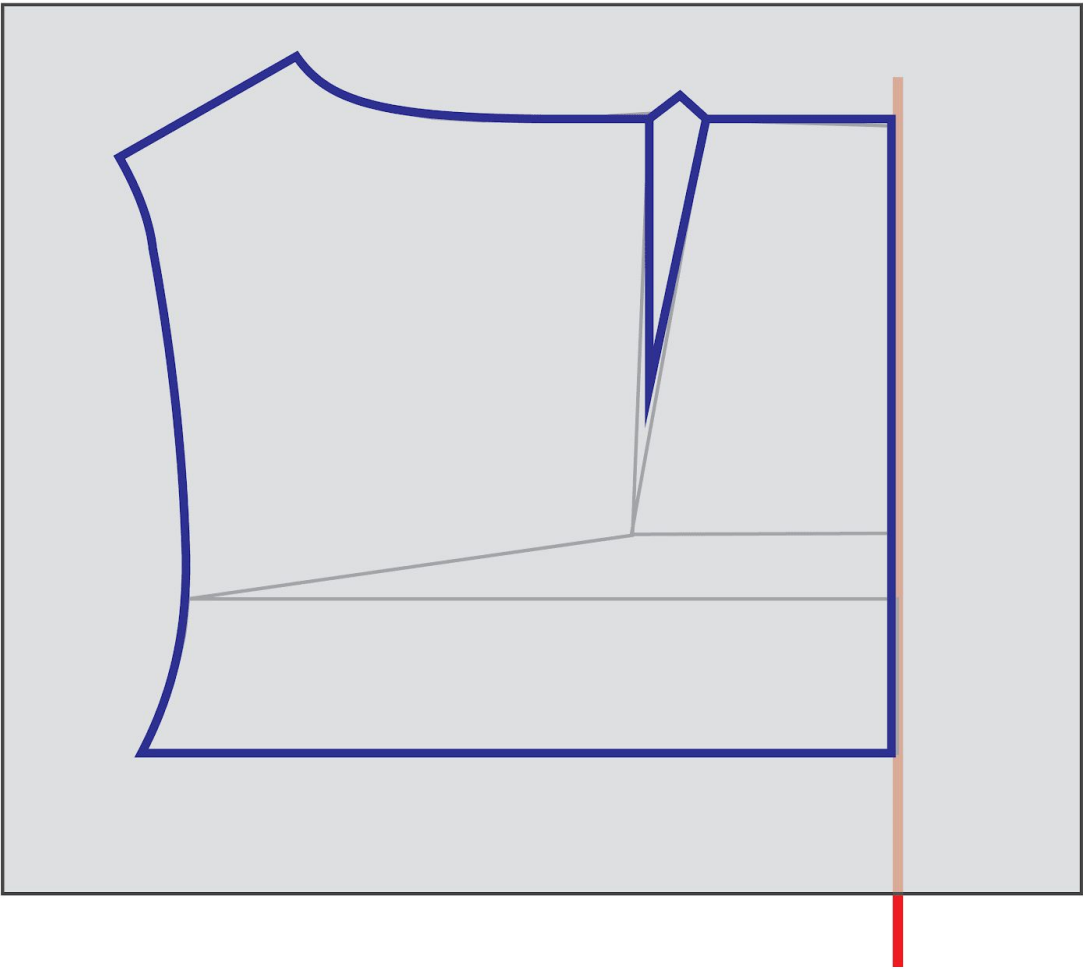
4. Cut the diagonal line, starting at the neckline and going down, again leaving a little paper hinge at the bottom. While maintaining the hinge, slide the right hand side piece over so that it is once again against the guideline.



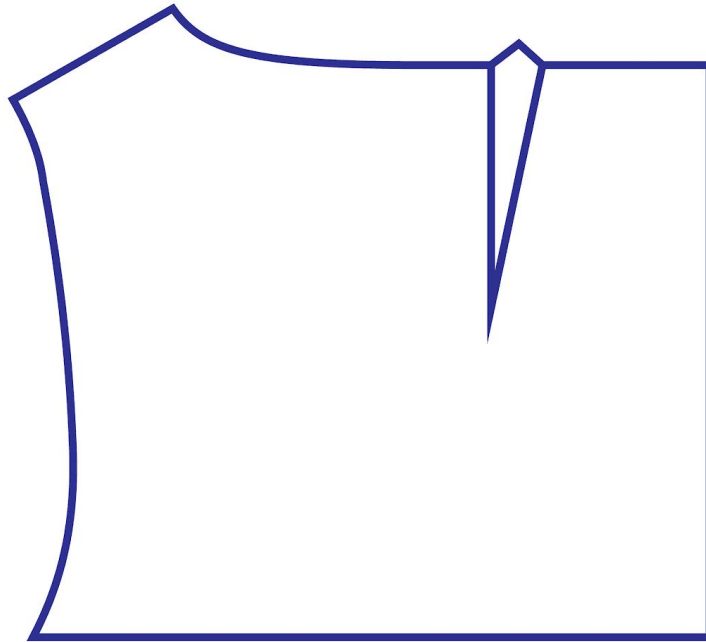
5. Adjust the gap between the bottom and top pieces (where the arrow is) so that it's the amount you calculated you needed to add in step 1.



6. Place a new piece of tracing paper on top of the pattern piece, and trace the new shape, smoothing out the neckline. Where the gap opened along the neckline, add a dart, about 3.5 inches long.



And there you have it! When you sew the piece you'll need to sew the dart first, and you'll have more space in the back, combined with a nicely fitted neckline.



Conclusion

I've included just two of the more common fit adjustments that women of our age encounter. I encourage you to make use of the reference materials I have used for this class.