# Fitted Dress Construction
# A Primer

## Lesson 1: Patterning the Skirt and Cutting the Dress

Maistresse Mathilde Bourette
Charlotte Johnson
charlotte.r.johnson@gmail.com
http://www.mathildegirlgenius.com

### Introduction

This is one of a series of instructions for turning your four-panel fitted dress mockup into something that you can wear.

This tutorial was written with beginner to intermediate-level sewers in mind. If something in these documents is unclear, please contact me and I will try to clarify or correct the instructions. There are often many ways to skin a cat. I am presenting techniques which work for me and for those who I've helped construct a gown.

I have provided a bibliography of main sources at the end, but quite a bit of this tutorial is the result of knowledge accumulated throughout years. These instructions are not heavily footnoted, as they're more of user's guide than formal documentation. Many of the references can be found in other papers located at my website. If you need your own documentation I'd suggest checking out the books in my bibliography. They're excellent sources, and are good foundation books for anybody interested in knowing more about the period.

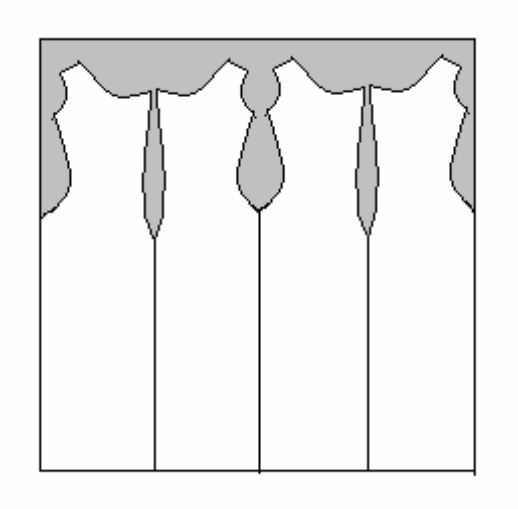

**Figure 1:** Sample cutting layout using a gore in each seam.

### Fabric Layout – No Waist Seam

On a dress with no waist seam, you'll have four main body panels, and a number of gores, depending on how you laid the pattern out on the fabric.

You can cut the body pieces in a number of ways. I recommend cutting the body pieces fairly narrowly, and placing gores in all four seams. Depending on the width of the fabric, and the width of the pattern, you can try to get all four

body panels out of one width of fabric. If you have cut four body panels that extend straight down to the floor, with very little flare, you'll need gores at both sides, and at the front and back.

Some of the gores are going to be full isosceles triangles, and some will be half that size, or right triangles. I will refer to these as full gores and half gores, respectively. If your front opening is going to extend below the gore point, you will need to insert a half gore into each side of the front seam. For the back and sides, it doesn't matter if you use a full gore or two half gores in each seam.

Keep in mind that the drape will be best if you attach a bias edge to a straight edge, instead of bias to bias. This means that the diagonal of the gore should be sewn to the straight edge of the main body panels.

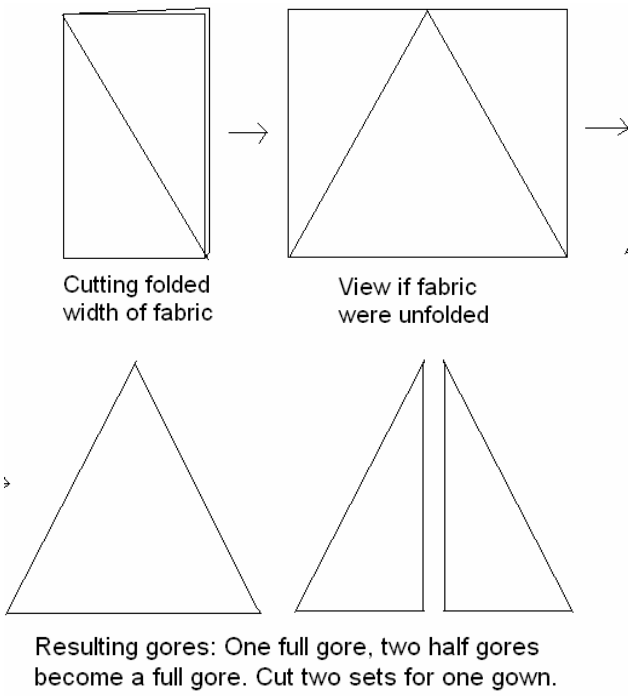


**Figure 2:** Cutting four gores using two lengths of fabric.

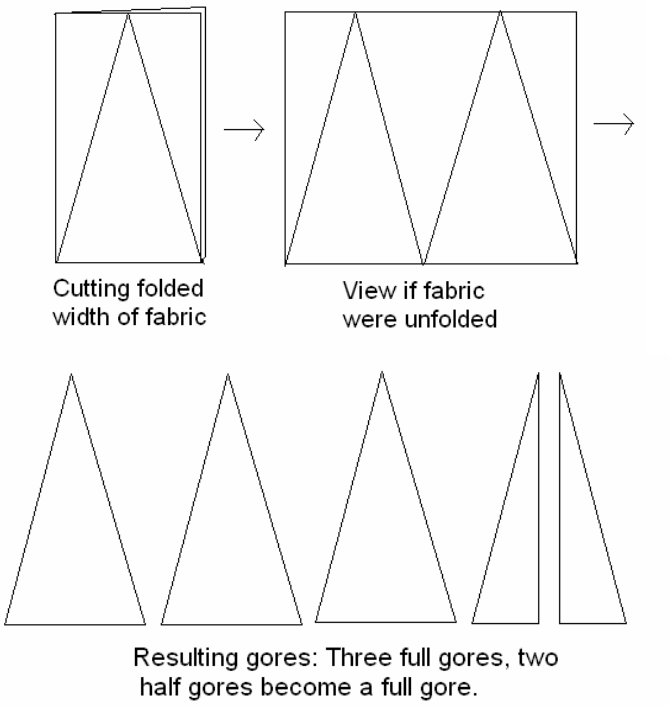


**Figure 3:** Cutting four gores using one length of fabric.

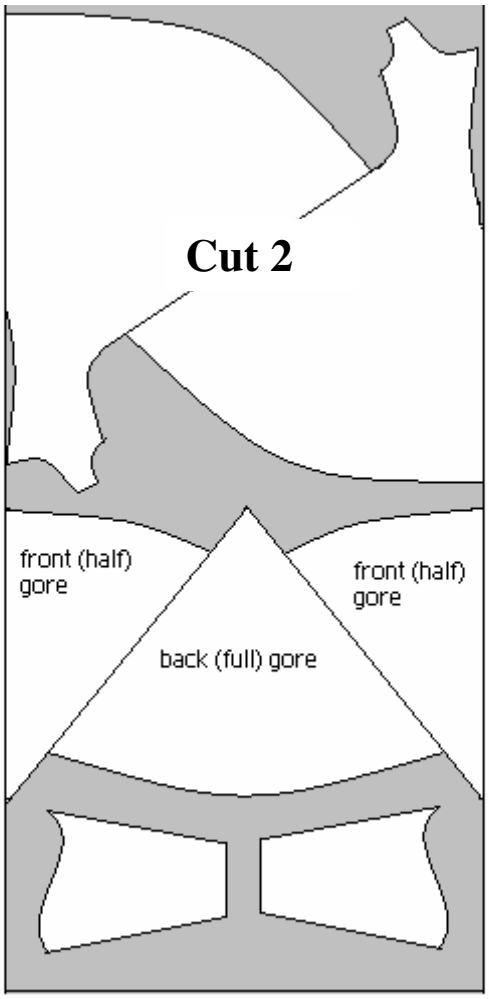


**Figure 4:** Sample layout using full width of fabric.

Another possible layout takes advantage of the full width of the fabric, cutting the side pieces integrally with the main body panels. This can mean less sewing and insetting of gores, but you might get some sagging on the side because you are sewing bias to bias. If you do this, make sure to hang the dress for several days to stretch before hemming.

As tempting as it may be to skip the front and back gores with this layout, resist. If all of the fullness is at the sides, your dress is not going to drape well.

**Fabric Layout – Trapezoidal Skirt Panels**

On a dress with a waist seam, cut the four body panels to the length of the waist. Remember, the weight of the skirt will pull it down somewhat. The skirt pieces will all be cut separately. There are several ways that the skirt panels can be cut, but I recommend a trapezoidal skirt configuration[1].

The number of skirt panels that you cut depends on how full you want the skirt, and how much fabric you have. Generally speaking, more skirt panels will look more flattering on a curvy figure. I recommend cutting 8 or 12 trapezoidal panels, when using 60" wide fabric.

The width at the top of the panel will be determined by the waist measurement. It is better to make the top of the skirt a bit larger than the waist, rather than smaller. I usually add a few extra inches, and place a few pleats at the back of the skirt attachment to make up the difference.

The calculation is: Top of trapezoid = (Waist/(# of Panels)) + 2*(seam allowance). I like to add the extra in such a way to make the measuring a little easier. For example, if your

[1] For more information and historical documentation for this method, see the article *Blue 15th Century Kirtle with Trapezoidal Skirt Panels*, at http://www.mathildegirlgenius.com/Documentation/KASF2006/KirtleWithTrapezoids.pdf

waist measurement is 30", and you want twelve skirt panels, add 6 inches, making the calculation (36/12) + one inch, therefore, four inches for the top of each trapezoid.

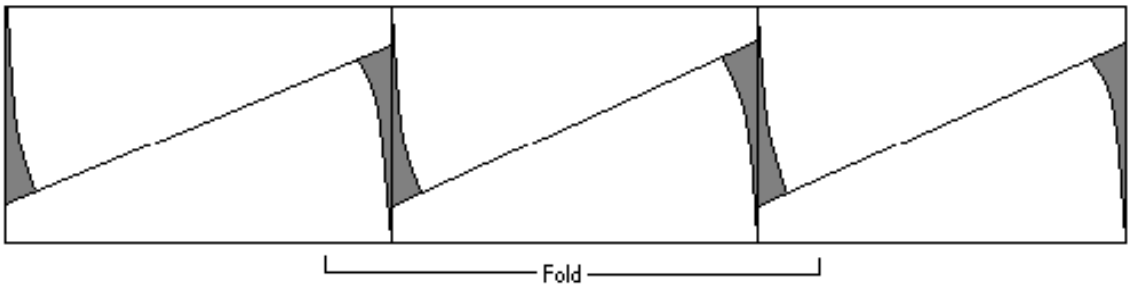


**Figure 5:** Sample layout of trapezoidal skirt panels

**Lining**

This is a good time to start thinking about lining, so that you can cut your lining fabric at the same time as the main fabric.

It's completely up to you how much you want to line your dress, if you want to line it at all. Being rather *ahem* well-endowed on top, I like to at least line the bodice. If I'm cutting a dress with a waist seam, I'll cut the lining for the four bodice pieces. If doing a non-waist seam dress, cut the lining hip length or longer. If you stop the lining at the waist, it might bunch up under the dress. If you're only lining to the hips, it's not necessary to line the top of the gores.

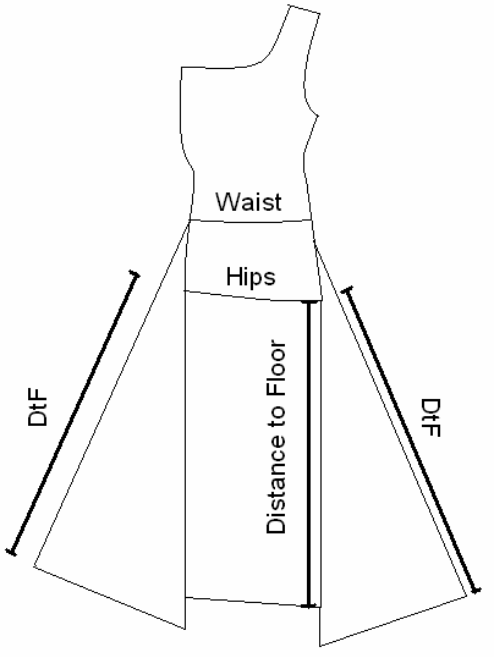


**Figure 6:** Distance to floor with gores.

**Determining length**

Step 19 of the dress fitting demo[2] has you draw a line around the wearer's hips, and measure to the floor. This line should be at or below the widest part of the hips, and theoretically, will be evenly distant from the floor all the way around. This can be used prior to cutting to help determine the length of the skirt. After the dress is sewn together, it's possible to get a fair approximation of a hem, if you're unable to otherwise mark the hem on the wearer.

Lay the mock up piece on the fabric. Using chalk, trace around the bodice portion, then, using the line, measure out how long the skirt will be.

[2] See http://www.mathildegirlgenius.com/DressFitting/DressDemo.htm for more information.

When adding gores, take into account the distance to the floor from the hips, then add in the distance from the hips up to the gore inset point. If you mark the gore points on the fabric, you can also measure directly from the gore point to the new hem. Keep in mind that the hem might be longer on the side than on the front.

When calculating the length of gores, don't forget to accommodate for seam allowance. A half inch seam allowance might add a few inches to the top of the point, when you consider the steep angle of the tip[3].

When calculating the length of the trapezoids in a trapezoidal panel skirt, consider that the distance from the waist to the floor might be longer on the sides or the back than it is in the front. To keep things simple, I'd just cut all of the trapezoids the same length.

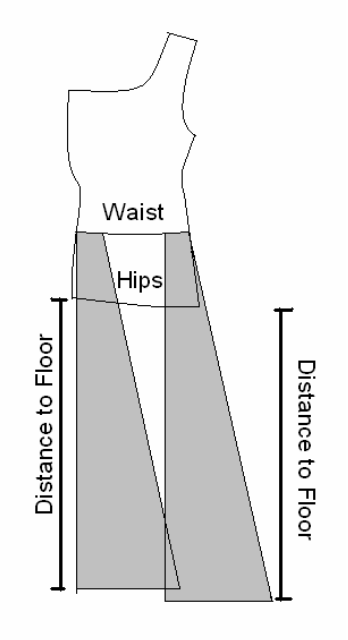


**Figure 7:** Distance to floor with trapezoidal panels

For hemming, it's possible to overlay the mock up onto the finished dress, on a flat surface, or pinned on while the dress is on a mannequin, and measure many points from the hips to the floor, deriving a smooth line to cut. My first choice would be to mark the hem on the wearer, but this can do in a pinch.

**Continue to *Lesson 2: Assembly and Lining***



[3] Technically speaking, the tangent of the angle of the tip is equal to twice your seam allowance over the additional length. So, if your seam allowance was a half inch, and the angle of the tip was 30 degrees, andd the additional length = L, the calculation would be Tan 30 = 1/L, therefore, you would add 1.73 inches. It goes up pretty fast, because if your angle is 20 degrees, you're looking at 2.75 inches in length, but I'd really just add "some" extra and call it good…