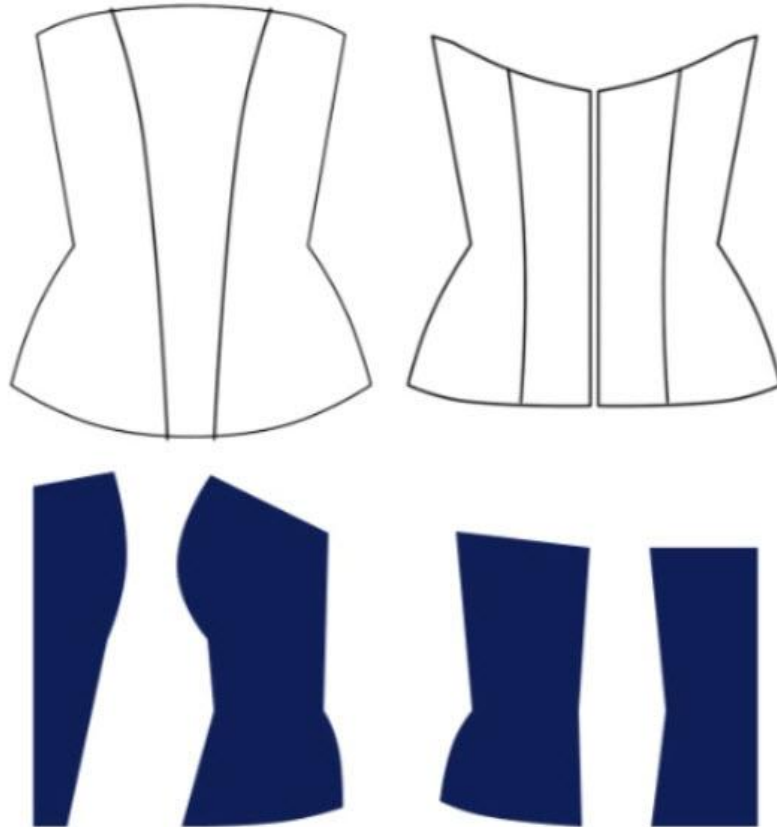


## Measuring and Altering Patterns.

I start working on the first corset which I am going to sew in what is known as the simplified technique.

I have chosen a simple basic design for the tailoring of this corset.

You can see a technical drawing of this design and its pattern schemes in this picture:



There are four parts in the pattern of my corset: 2 front pieces and 2 back pieces.

There is a crease line in the middle of the front and a cut in the middle of the back because the lacing will go across the middle of the back.

## *Tools and Materials Required for Corset Tailoring:*

You are not going to need that many materials to sew this corset.

I have made a collage of all things necessary for making this corset and took a picture of it.

Please take a look at what you see on the picture.



There are:

Basic fabric that I'm going to use for the corset.

Some iron-on fabric. I am using iron-on batiste.

Thread and needles.

Rigilene bones: both wide (0.5") and narrow (0.3").

Measuring tape.

Scissors.

Pruner. I use it for cutting the bones.

Ribbons.

Plastic bones. I use them for adding support to the curves of the corset.

Small flock of padding polyester. I use it for covering corset cups.

### *Altering a Standard Pattern.*

You need to make certain calculations and alter the standard pattern a little in order to be able to use it for any non-standard forms.

**The main rule:** I need to preserve the beautiful corset shape and at the same time stretch (or the other way round - squeeze) the pattern so that the new size can fit the forms of the client.

**I make a table like this before I start working:**

Measurements	Kate	Pattern	BM	Front side	Back side	Adjusted back side	Back curve
Bust middle	7.1						
Bust front	18.1						
Under-bust front	14.2						
Bust circumference	33.9						
Under-bust circumference	27.6						
Waistline	26						
Stomach	33.9						
Clip	3.5 3.5						
Side length	7.1						

There are 8 columns and 10 lines in the table.

**Column 1** – necessary measurements that you need to take off the client.

I assume that before buying this book you had watched my free tutorials on taking clients' measurements where I explain in detail how it is done and how each measurement is used.

**Column 2** – your client's individual measurements (Kate).

I have written them down into the table.

**Column 3** – measurements or sizes taken off the patterns.

Let me explain what it means.

I need to measure the pattern along the main circumference lines.

This column should contain the values of the **same measurements** I took off Kate but **taken off my pattern**.

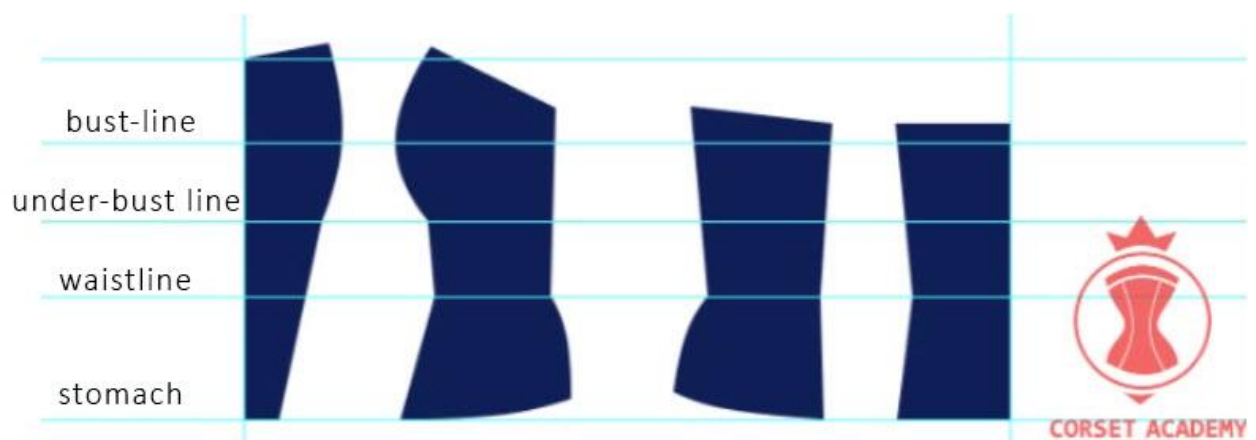
Only then I can imagine what size the corset will be if I sew it according to the standard patterns and how much the size of the standard pattern should be altered (made smaller or bigger) so that the client could put her corset on.

There are necessary notches on the pattern corresponding to the main lines:

- bust;
- under-bust line;
- waistline;
- stomach.

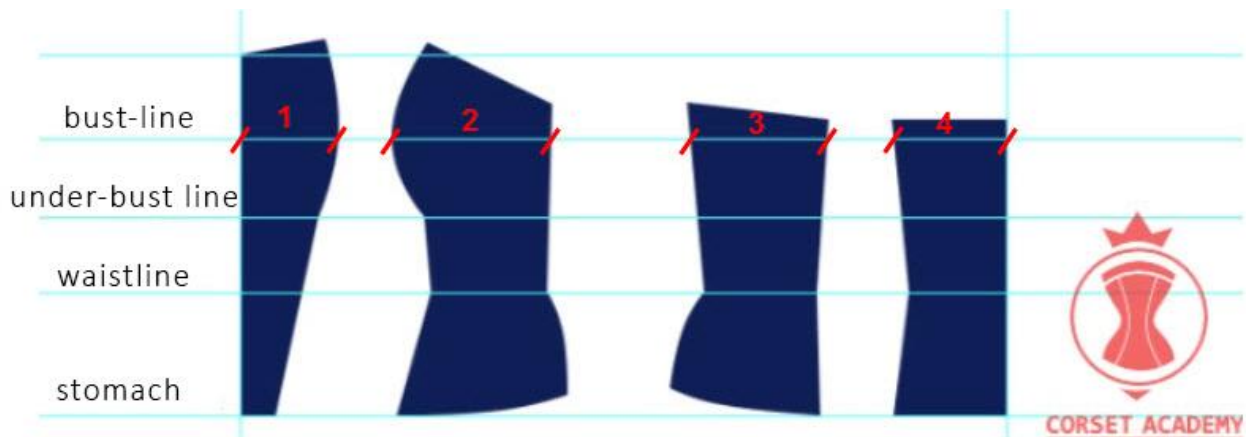
The task is to lay out the patterns on the table in such a way that the main lines are parallel to each other and go through the notches of all pattern pieces.

Please take a look at how I spread the patterns on the table:



Then I measure each section length with a ruler or a measuring tape.

For example I measure sections 1, 2, 3 and 4 **along the bust-line**.



I add up these values.

I take away the total value of seam allowances.

As a result I've got some value.

I multiply this value by two.

The result is the "bust circumference".

In this very case **the bust circumference of the standard pattern is 36.6 inches.**

**I write this value down into the third column of the table against the "bust circumference" measurement (line 5).**

Measurements of other section lengths are taken exactly the same way and fill up the third column of my table completely.

Measurements	Kate	Pattern	BM	Front side	Back side	Adjusted back side	Back curve
Bust middle	7.1	7.9					
Bust front	18.1	19.7					
Under-bust front	14.2	15.7					
Bust circumference	33.9	36.6					
Under-bust circumference	27.6	31.1					
Waistline	26	30.7					
Stomach	33.9	38.6					
Clip	3.5 3.5	4.7 5.1					
Side length	7.1	7.5					

I find this method very easy. However there are many questions addressed to me concerning exactly this step. Therefore I would recommend you reading this part of the tutorial one more time and very carefully.

There is another method of taking measurements off a corset sewn based on the standard pattern.

You could sew a corset out of some mock-up fabric, put it on the dress-form and draw some cords along all circumference lines. Then you would outline them with a pencil, measure them and write down the values.

As a result I have the following measurements at the moment:

- «bust middle» - distance between the protruding points of the bust;
- «bust front» - central bust line at the front;
- «under-bust front» - under-bust line at the front measured from side to side;
- «bust circumference» - full circumference of the bust-line;
- «under-bust circumference» - full circumference of the under-bust line;
- «waistline» - full circumference of the waistline;
- «stomach» - full circumference of the stomach line.

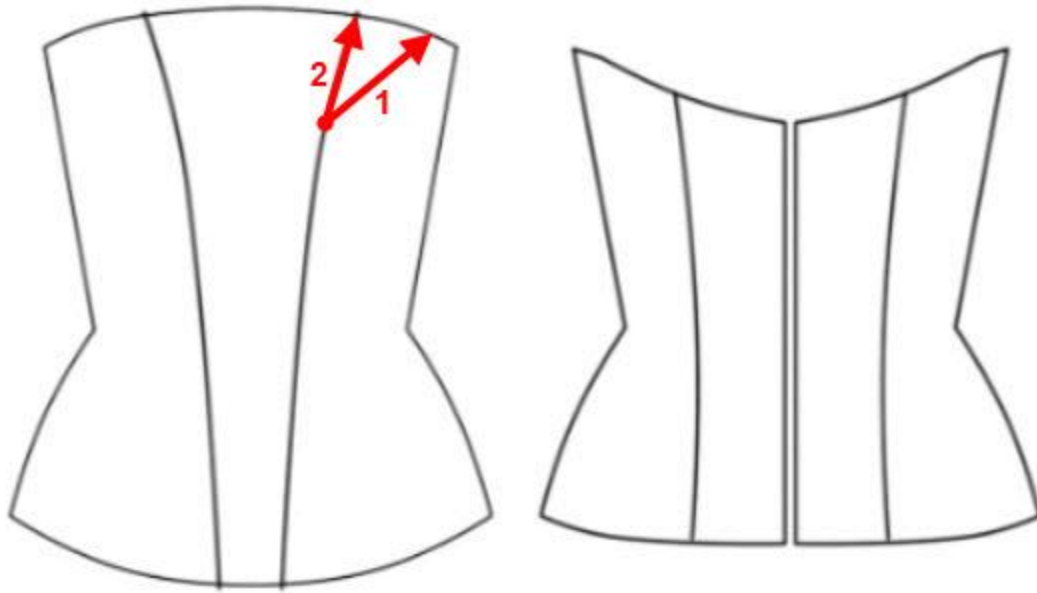
It is necessary to mark **the distance between the waistline and this measurement**. The line of the stomach is normally the spot where the corset ends.

**In this very case this distance is 4.7 inches from the waistline.**

When taking this measurement off a client I always note the distance from the waistline and put it into the table. And afterwards when I start measuring the pattern I draw a stomach line at exactly the same distance from the waistline.

- «clip».

In this case I have taken a “clip” measurement in only two directions: from the bust middle to the underarm (line 1) and from the bust middle along the curve (line 2).



The standard pattern should be measured at exactly the same spots.

- «side length» - distance from the waistline to the upper point of the corset along its side seam.

**Now I start re-calculating my standard pattern based on Kate's individual measurements.**

I recommend those not yet familiar with my re-calculation technique to watch my free tutorials on the topic in advance. It's really going to be helpful.

Most of my students have got acquainted with my philosophy and agreed that it is much easier and more reliable to use a worked-through standard pattern.

And for those who still doubt themselves or who haven't fully understood my methods yet I would recommend that you start sewing corsets using my unclosed side seam technique. It means that even when the corset is basically finished you will still be able to alter the circumferences by adjusting the side seams. In other words, you can fix the situation if your calculations happen to be slightly wrong.

Only once you have sewn a couple corsets and understood my methods you can easily cut corsets with closed side seams and make fitting tests with a finished garment.

**We are returning to the calculations.**

The first measurement under comparison is the **“bust middle” measurement**.

If the measurements of the pattern and the client coincide you won't have to make any corrections and the whole column 4 of the table should be left out during re-calculation.

But in my case Kate's measurement is 7.1 inches against the pattern's 7.9 inches which means I have to alter the pattern along the middle crease line.

Let us calculate:

$$7.1'' - 7.9'' = -0.8''$$

I have to divide this value into 2 sides - the right and the left.

Therefore:

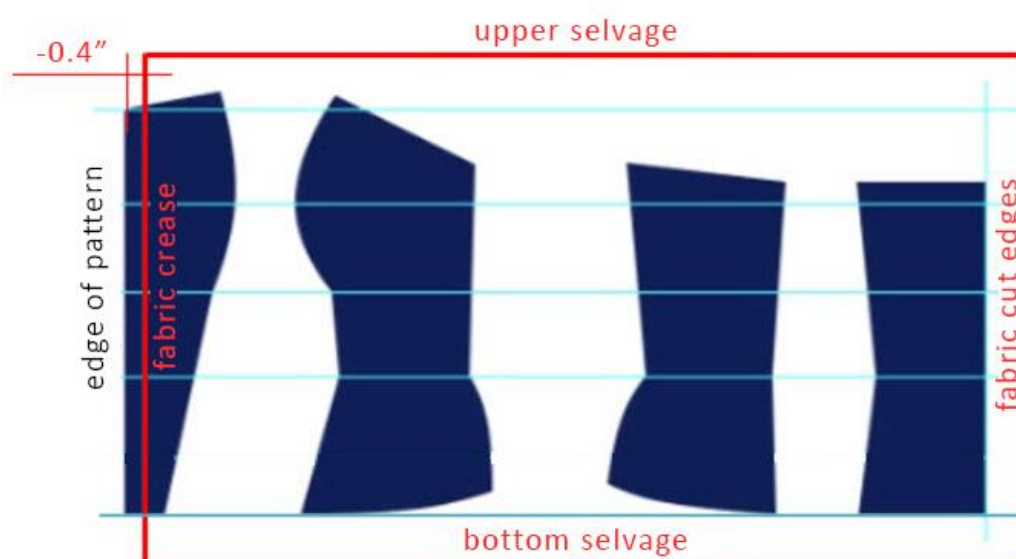
$$-0.8'' \div 2 = -0.4''$$

I write this value of -0.4 inches into the table (column 4, line 2).

The "bust middle" measurement of the standard pattern is larger than Kate's. This means I need to take away 0.4 inches (the value was negative) from the standard pattern to adjust it to Kate's measurements.

Therefore the crease of the fabric is going to be 0.4 inch inwards to the central front part of the pattern.

And when I make a pattern after Kate's measurements my standard pattern should go 0.4 inches beyond the crease of the fabric.



Since I have shifted the pattern by 0.4 inches, the 0.8 inch value (0.4 inch from each side of the pattern) is going to be removed from all circumferences of the corset: bust, under-bust, waistline and stomach.

I am going to write the -0.4 inch value in all the lines of column 4 in order to keep this in mind.



Let me remind you that the value is -0.4 inches for each side of the pattern.

Measurements	Kate	Pattern	BM	Front side	Back side	Adjusted back side	Back curve
Bust middle	7.1	7.9	-0.4				
Bust front	18.1	19.7	-0.4				
Under-bust front	14.2	15.7	-0.4				
Bust circumference	33.9	36.6	-0.4				
Under-bust circumference	27.6	31.1	-0.4				
Waistline	26	30.7	-0.4				
Stomach	33.9	38.6	-0.4				
Clip	3.5 3.5	4.7 5.1					
Side length	7.1	7.5					

Now I want to determine where the front side seam will be.

There are two measurements determining the location of the side seam: “bust front” and “under-bust front”.

**Bust front:**

It is 19.7 inches on the pattern and 18.1 inches according to Kate’s measurements.

It is clear that the side seam is going to be shifted.

Let us calculate this shift.

I have already adjusted down all circumferences by 0.8 inches when calculating the “bust middle” measurement and shifted the pattern by 0.4 inches against the fabric crease.

And this means:

$$19.7'' - 0.8'' = 18.9''$$

$$(18.1'' - 18.9'') \div 2 = -0.4''$$

Therefore the side seam along the bust-line is going to be adjusted down by 0.4 inches.

I write this value into the table (column 5, line 3).

**Under-bust front:**

Let me calculate the location of the side seam.

It is 15.7 inches on the pattern and 14.2 inches on Kate.

I am doing it the same way keeping in mind that the bust middle has been reduced by 0.8 inches.

$$15.7'' - 0.8'' = 15''$$

$$(14.2'' - 15'') \div 2 = -0.4''$$

I add this value to the table (column 5, line 4).

It is now perfectly clear that the side seam is shifted by 0.4 inches.

However I am going to adjust down the whole pattern by 0.4 inches to keep the beautiful side shape of the corset - this lovely curve - thereby reducing all circumferences (bust, under-bust, waistline, stomach) by 0.8 inches.

I add the -0.4 inch value into the lines 5, 6, 7 and 8 of the column 5.

**Clip measurement.**

**For the scye:**

Since there are 4.7 inches on the pattern corresponding to the 3.5 inches of the client's measurement, I do the following:

$$3.5'' - 4.7'' = -1.2''$$

**Along the curve line:**

It is 5.1 inches on the pattern and the client's measurement shows 3.5" which means I need to do the following:

$$3.5'' - 5.1'' = -1.6''$$

The values are added into the table (column 5, line 9).

**Side length.**

It is 7.5 inches on the pattern and 7.1 inches on Kate, therefore the side length should be adjusted down by:

$$7.1'' - 7.5'' = -0.4''$$

This value is also recorded in the table (column 5, line 10).

Measurements	Kate	Pattern	BM	Front side	Back side	Adjusted back side	Back curve
Bust middle	7.1	7.9	-0.4				
Bust front	18.1	19.7	-0.4	-0.4			
Under-bust front	14.2	15.7	-0.4	-0.4			
Bust circumference	33.9	36.6	-0.4	-0.4			
Under-bust circumference	27.6	31.1	-0.4	-0.4			
Waistline	26	30.7	-0.4	-0.4			
Stomach	33.9	38.6	-0.4	-0.4			
Clip	3.5 3.5	4.7 5.1		-1.2 -1.6			
Side length	7.1	7.5		-0.4			

**Now I would like to go into more detail concerning the side length.**

In my case I need to lower the side of the standard pattern by 0.4 inches.

**According to the rule of side adjustment you cannot cut off more than 0.6 inches atop.**

And this makes perfect sense.

The thing is that when the difference between the side seam lengths exceeds 0.8 inches it means the client has different proportions: the distance between her waist and her bust differs from the standard.

If you for instance reduce the sides by 2 inches for a petite client - the neckline cut of the corset is going to be right below her chin.

That is why the pattern should be altered **in a different manner** if the difference between the side seam lengths exceeds 0.8 inches.

You need to cut all patterns along the waistline and lay the top and bottom parts onto each other shifting them up by the value of this difference, i.e. reduce the pattern length.

The exact same thing needs to be done if you want to increase the side length: you simply prolong the side seam if the difference is up to 0.6 inches; if the difference is greater - you need to **expand** the pattern halves cut along the waistline by the required value.

**Now I start calculating alterations for the back side seam.**

There are naturally no more “bust front” or “under-bust front” measurements now.

Our next measurement is the “**bust circumference**”.

It is 36.6 inches on the pattern and 33.9 inches according to Kate’s measurements.

I have already taken into account the alteration along the middle of the bust-line (-0.4”) and the front side seam (-0.4”).

This value makes up 1.6 inches for two pattern halves.

Thus:

$$36.6'' - 1.6'' = 35''$$

$$(33.9'' - 35'') \div 2 = -0.6''$$

The value is added to the table (column 6, line 5).

**Under-bust circumference.**

It is 31.1 inches on the pattern and 27.6 inches for Kate.

It is calculated the same way:

$$31.1'' - 1.6'' = 29.5''$$

$$(27.6'' - 29.5'') \div 2 = -1''$$

I write down this value in the table (column 6, line 6).

I don’t think much about the values for now; I just calculate and record them.

**Waistline.**

It is 30.7 inches on the pattern and Kate’s measurement makes 26 inches.

Let us calculate:

$$30.7'' - 1.6'' = 29.1''$$

$$(26'' - 29.1'') \div 2 = -1.6''$$

I add the value to the table (column 6, line 7).

**Stomach measurement at a 4.7 inch distance above the waistline.**

It is 38.6 inches on the pattern and 33.9 inches on Kate.

Let us calculate:

$$38.6'' - 1.6'' = 37''$$

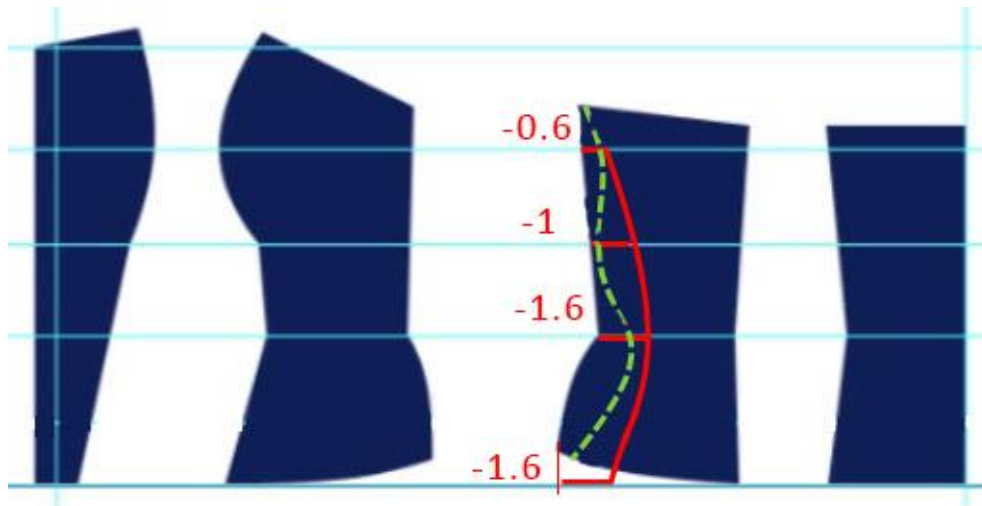
$$(33.9'' - 37'') \div 2 = -1.6''$$

This value is added to the table (column 6, line 8).

Measurements	Kate	Pattern	BM	Front side	Back side	Adjusted back side	Back curve
Bust middle	7.1	7.9	-0.4				
Bust front	18.1	19.7	-0.4	-0.4			
Under-bust front	14.2	15.7	-0.4	-0.4			
Bust circumference	33.9	36.6	-0.4	-0.4	-0.6		
Under-bust circumference	27.6	31.1	-0.4	-0.4	-1		
Waistline	26	30.7	-0.4	-0.4	-1.6		
Stomach	33.9	38.6	-0.4	-0.4	-1.6		
Clip	3.5 3.5	4.7 5.1		-1.2 -1.6			
Side length	7.1	7.5		-0.4			

Now if you look at the alteration values for the side seam on the back you might think there is no symmetry at all and the side seam won't look good.

Please take a look at the picture to see what it is going to look like:



We have got a very bold side seam (the red line).

But you can at least trace the side line here.

And there are cases when the side line is totally irregular (the green pecked line on the picture).

Such cases cause many questions and the tailor loses heart so to say.

But one should not get disappointed!

Let us reflect upon it together.

**First of all I should have left the side seam on the client's pattern in about the same state as that of the standard pattern.**

I refer to the table.

The smallest alteration of the side seam is 0.6 inches along the line of the bust circumference.

So the best is to make the side seam go parallel to the side seam of the standard pattern with a 0.6 inch shift.

But I need to shift it by 1 inch along the under-bust circumference.

If I shift the side seam the way I like - by 1 inch - the following happens:

$$1'' - 0.6'' = 0.4''$$

And along the waistline and stomach there is:

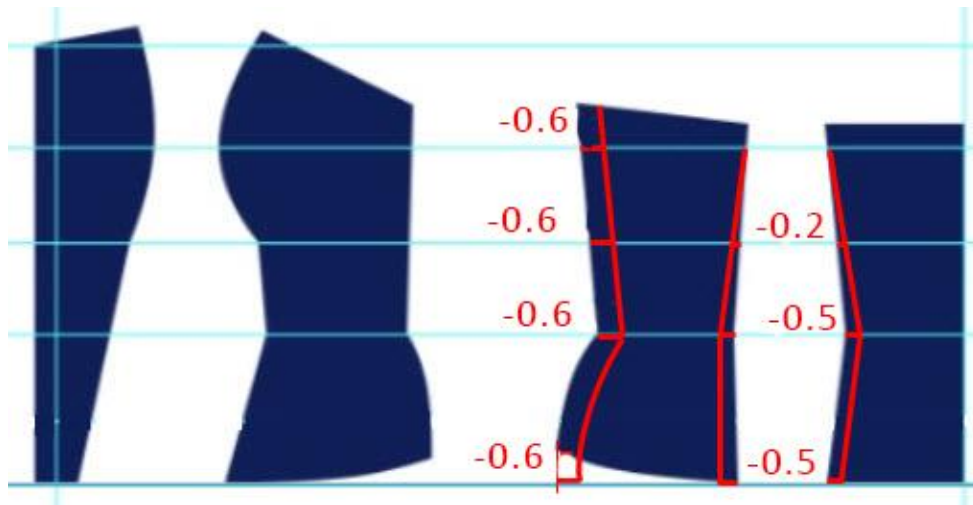
$$1.6'' - 0.6'' = 1''$$

**I can distribute these extra inches between the curve lines!**

I should shift every curve by  $0.4'' \div 2 = 0.2''$  along the under-bust circumference line.

And **along the waistline and stomach** I should shift every curve by  $1'' \div 2 = 0.5''$ .

You can see in the picture what happens in this case:



Now I have a slightly altered pattern. I have basically done it thanks to the dart at the back. With the help of this re-distribution you can make a well-shaped corset for a client of any body type.

**I adjust down the length of the side on the back by 0.4 inches.**

Having re-distributed it I add the final values to the table (columns 7 and 8):

Measurements	Kate	Pattern	BM	Front side	Back side	Adjusted back side	Back curve
Bust middle	7.1	7.9	-0.4				
Bust front	18.1	19.7	-0.4	-0.4			
Under-bust front	14.2	15.7	-0.4	-0.4			
Bust circumference	33.9	36.6	-0.4	-0.4	-0.6	-0.6	
Under-bust circumference	27.6	31.1	-0.4	-0.4	-1	-0.6	-0.2
Waistline	26	30.7	-0.4	-0.4	-1.6	-0.6	-0.5
Stomach	33.9	38.6	-0.4	-0.4	-1.6	-0.6	-0.5
Clip	3.5 3.5	4.7 5.1		-1.2 -1.6			
Side length	7.1	7.5		-0.4		-0.4	

**The calculation is done!**

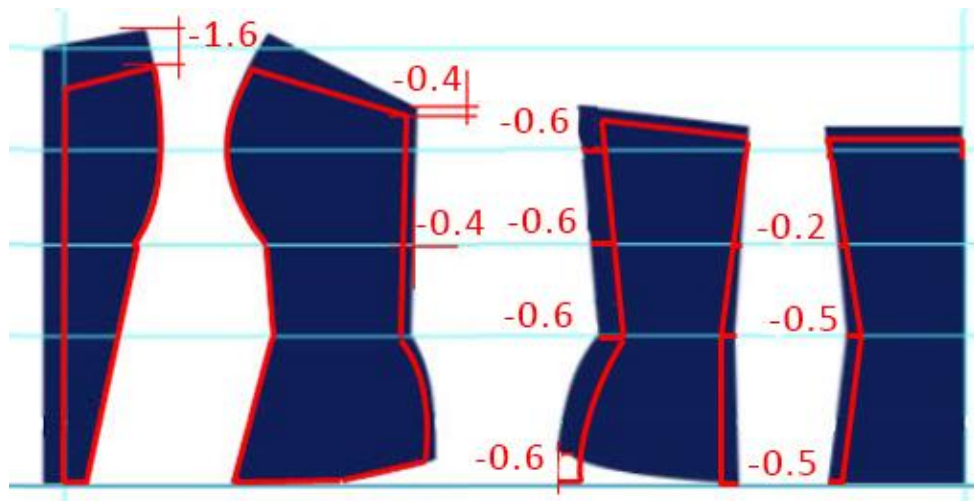
**A very important remark: you absolutely mustn't alter the shape of bust curves when adjusting the standard pattern!**

These curves are responsible for the fitting of the corset, its balance and the fitting of the neckline cut!

Even the slightest change of these curves usually leads to a distortion of the garment!

That is why you should try to adjust the size of the garment only with the help of the front middle and side seams and afterwards apply final adjustments with the help of the back curve (back dart).

And now I would like to show you the way the standard pattern has changed after my calculations:



This way I have adjusted the standard pattern after Kate's individual measurements.

The calculations I've made are so precise that during every fit test I am always amazed at how well the corset fits the client after such uncomplicated calculations. During the next tutorial I am going to perform this directly on fabric.