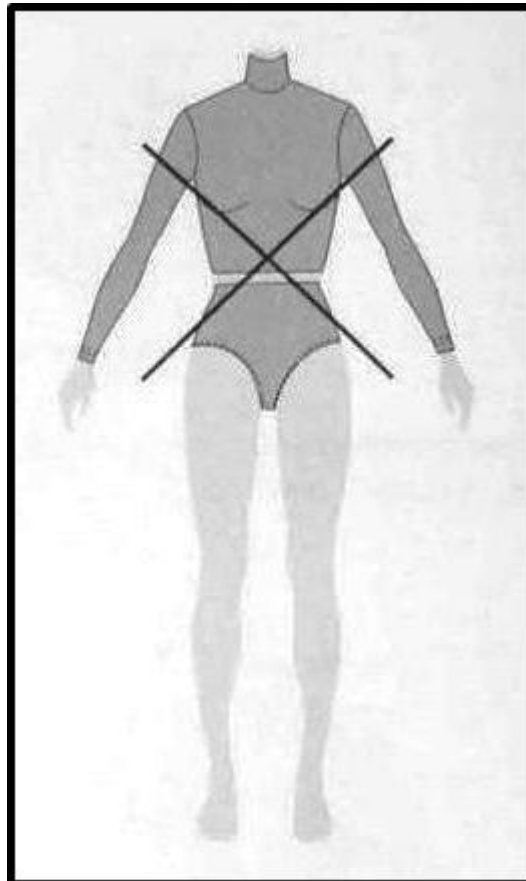


# DESIGNING & PATTERNMAKING FOR STRETCH FABRICS

## BIKINI BOTTOMS



You may expect that you can just cut off a **Leotard** to create a **Bikini**, but remember, the length measurements were reduced to accommodate the lengthwise stretch of the fabric. Once the **Leotard** is cut, it will spring back & be lower down on the body.

You must create a separate **Bikini** slope that does not have as much lengthwise reduction.

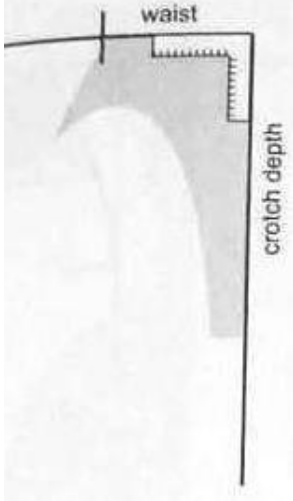
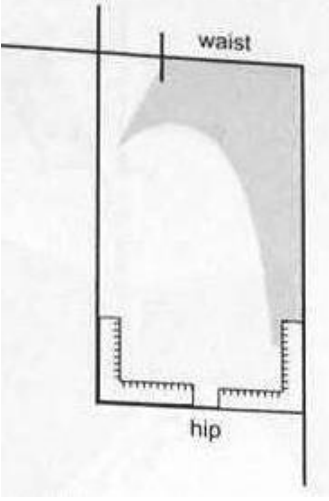
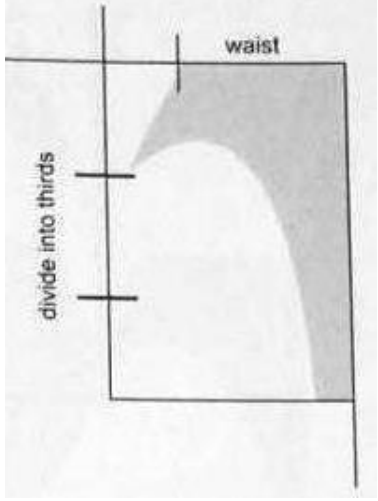
## **4-WAY-STRETCH REDUCTIONS**



Note that the crotch depth is multiplied X **0.95**, a reduction of **5%**, because the 4-way-stretch reduction of **10%** is too much, & a **0%** reduction, as in 1-way-stretch, is too little & will cause the crotch to sag.

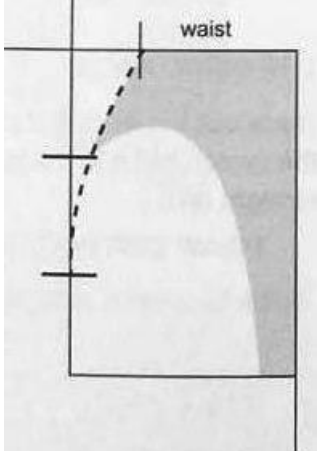
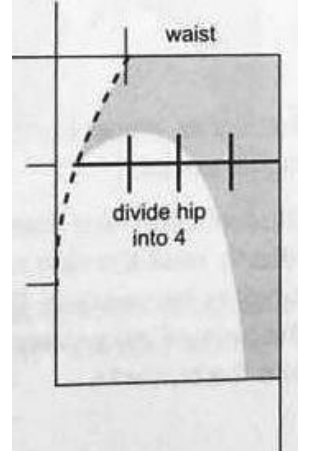
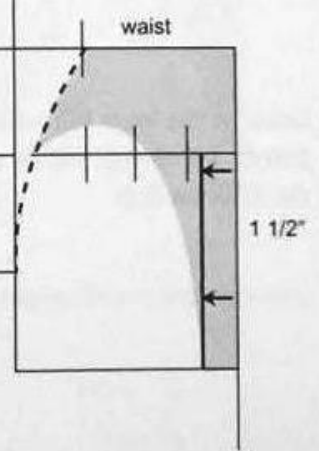
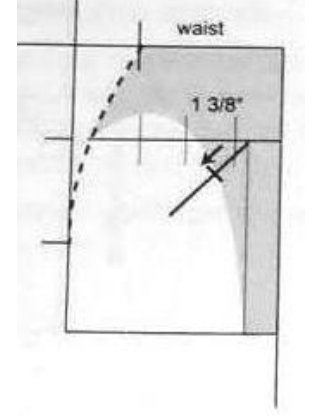
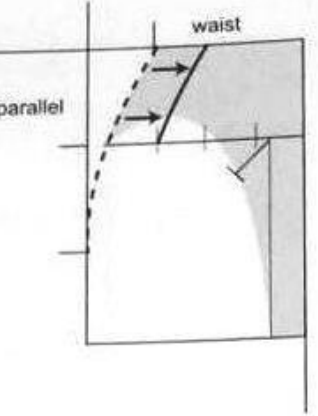
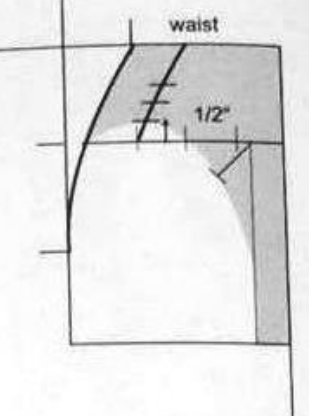
This draft is for the Bikini bottom, & should be used with 4-way-stretch fabrics.

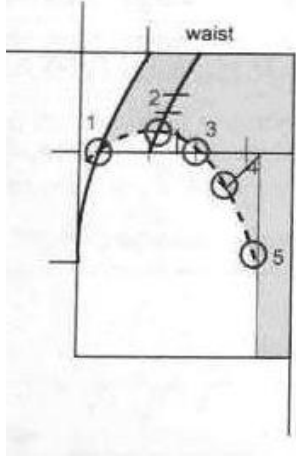
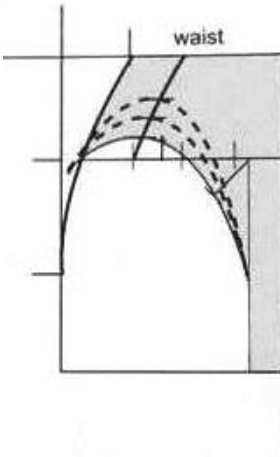
		Waist	Hip	Crotch depth
Multiply by:		X 0.90	X 0.90	X 0.95
Extra-Extra Small	0	21+1/8	31	9
Extra Small	2	22	32	9+1/8
Small	6	23	32+7/8	9+1/4
Medium	10	23+7/8	33+3/4	9+3/8
Large	14	24+3/4	34+5/8	9+1/2
Extra Large	18	26+1/8	36	9+5/8
Extra-Extra Large	20	27+1/2	37+3/8	9+5/8

		
<p>Draw intersecting lines, &amp; measure the waist amount &amp; the crotch depth amount.</p>	<p>Square a line at the crotch depth, mark with the hip measurement, &amp; square a guideline up to the waist.</p>	<p>Divide the guideline into thirds.</p>

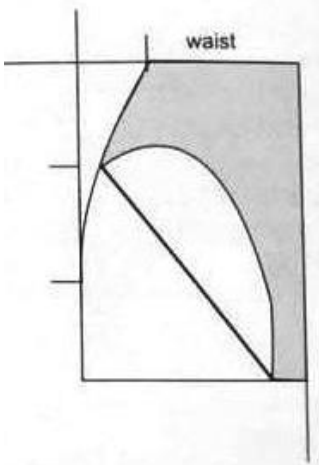
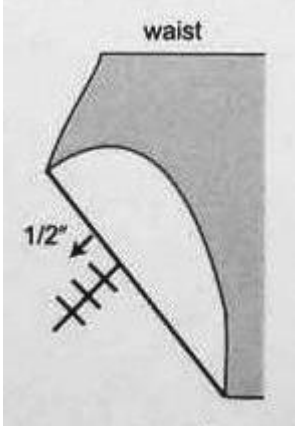
	Waist	Quarter of waist	Crotch depth	Hip	Quarter of hip	Crotch depth	Thirds
<b>Extra-Extra Small</b>	21+1/8	5+1/4	9	31	7+3/4	9	3
<b>Extra Small</b>	22	5+1/2	9+1/8	32	8	9+1/8	3
<b>Small</b>	23	5+3/4	9+1/4	32+7/8	8+1/4	9+1/4	3+1/8
<b>Medium</b>	23+7/8	6	9+3/8	33+3/4	8+1/2	9+3/8	3+1/8
<b>Large</b>	24+3/4	6+1/4	9+1/2	34+5/8	8+5/8	9+1/2	3+1/8
<b>Extra Large</b>	26+1/8	6+1/2	9+5/8	36	9	9+5/8	3+1/4
<b>Extra-Extra Large</b>	27+1/2	6+7/8	9+5/8	37+3/8	9+3/8	9+5/8	3+1/4

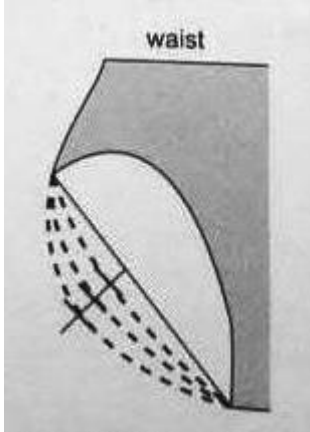
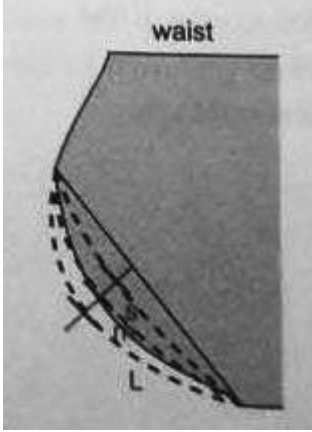
## THE BIKINI FRONT

		
<p>Draw in the hip curve by placing #4 of the variform curve at the waist, blending as well as possible to the lower mark on the outseam.</p>	<p>Divide the upper hip line into 4 equal sections.</p>	<p>Mark a guideline <math>1 + \frac{1}{2}</math> inches from the center front.</p>
		
<p>Find the bias in the intersection &amp; measure down <math>1 + \frac{3}{8}</math> inches.</p>	<p>Draw guideline parallel to the side seam that lines up with the mark on the horizontal guideline.</p>	<p>Measure up the guideline <math>\frac{1}{2} + \frac{1}{2} + \frac{1}{2}</math> inches.</p>

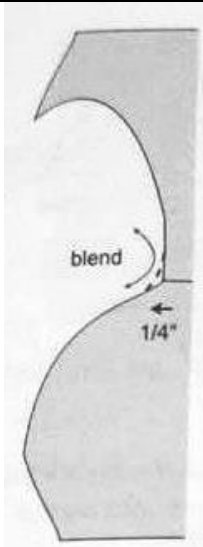
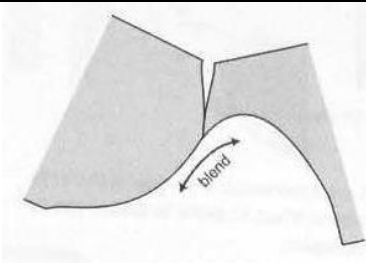
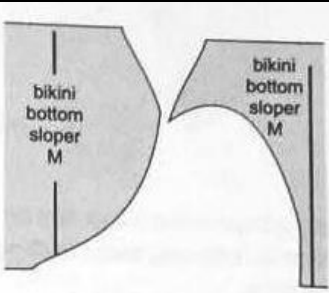
	
<p>Draw in the front leg, using connection points 1-2-3-4-5, with a smooth &amp; continuous line.</p>	<p>For higher, sexier front legs, use the higher points.</p> <p>Students &amp; new designers often mistakenly raise the side seams to create a higher leg opening. This will cause the back of swimsuit to collapse into the buttocks.</p>

## THE BIKINI BACK


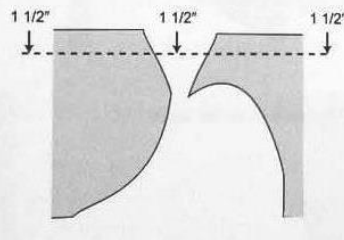
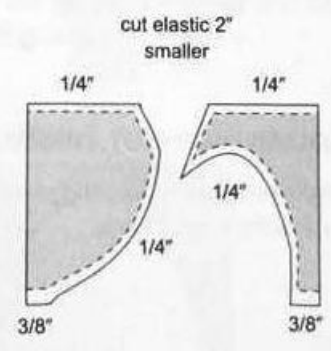

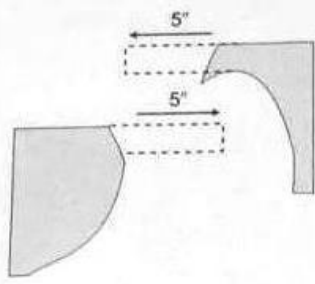
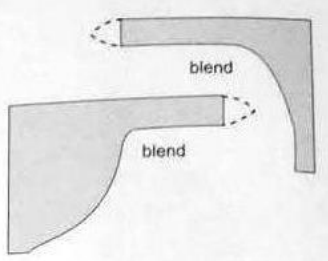
	
<p>Trace out the front draft &amp; connect the crotch point to the hip point with a straight line.</p>	<p>Find the middle of the line &amp; measure out <math>\frac{1}{2} + \frac{1}{2} + \frac{1}{2}</math> inches.</p>

	
<p>Draw a smooth curve for each of the marks, as illustrated.</p>	<p>Label the lines as Small, Medium, &amp; Large.</p>


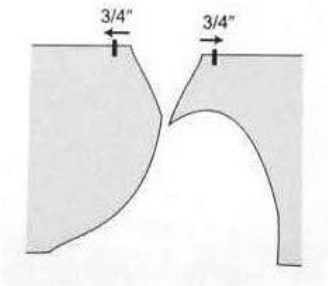
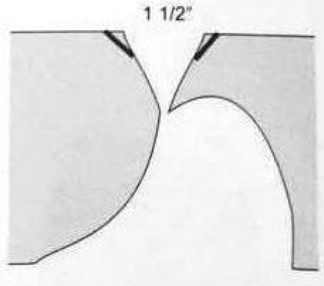
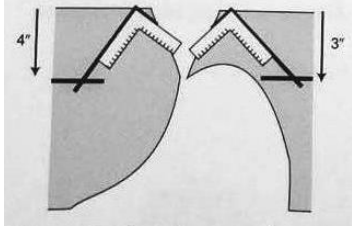
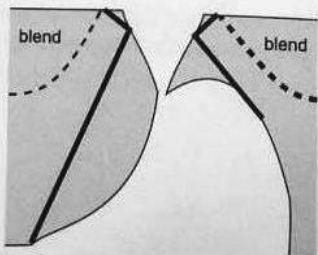
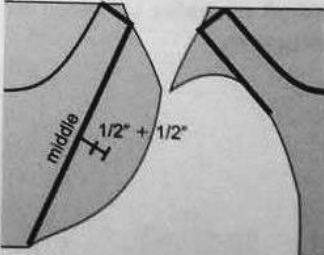
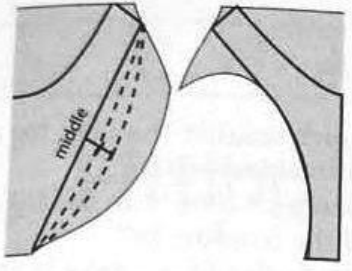
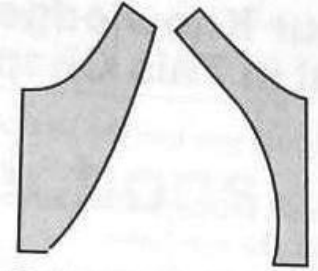
## BLENDING & TRUEING

		
<p>Line up the crotch seams across from each other &amp; blend the curve.</p> <p>You will have to increase the size of the crotch by 1/4 inches to make the curve smooth enough for elastic.</p>	<p>Place the front &amp; back beside each other &amp; walk the side seams down from the waist.</p> <p>Blend a smooth &amp; continuous sexy line.</p>	<p>Label the slopers as illustrated.</p>

## BIKINI WITH LOWERED WAIST

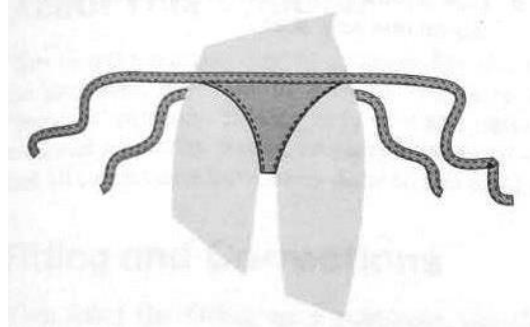
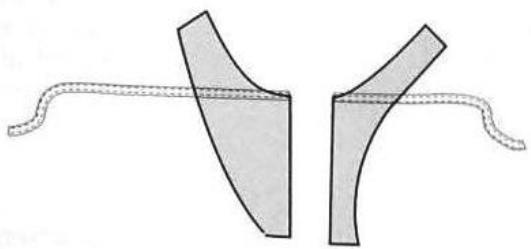
		
<p>This draft illustrates a lowered waist Bikini bottom.</p>	<p>Lower the waist by as much as your design requires, illustrated here at 1+1/2 inches.</p>	<p>Add the necessary seam allowances.</p>
		
<p>Create a Bikini bottom that ties on the side by following these drafting instructions:</p>	<p>Lower the waist, &amp; extend the side seams 5 inches on all sides to create the tie extension.</p>	<p>You can leave the ends squared or you can blend them into curves.</p>

## BRAZILIAN HIGH-CUT SWIMSUIT

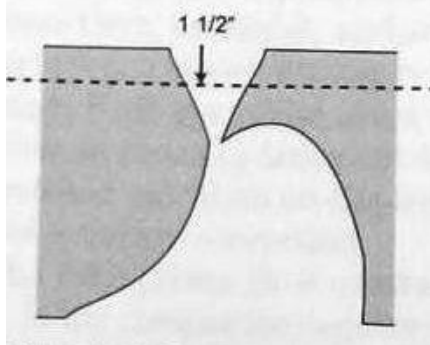
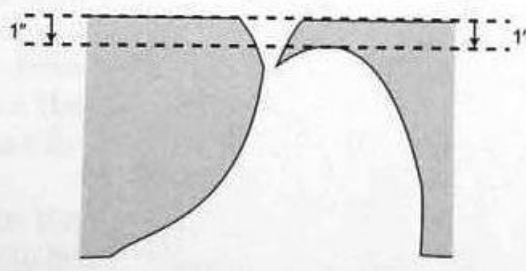
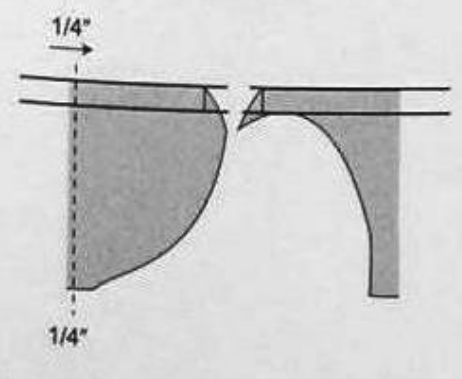
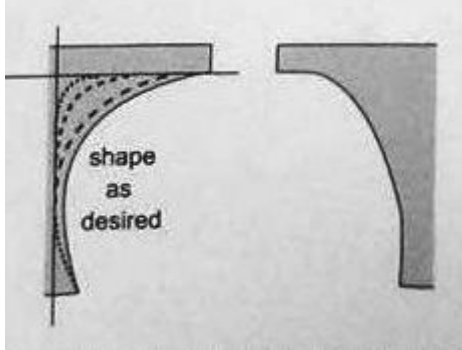
		
<p>This swimsuit has a very high leg, with a very low front &amp; back.</p>	<p>Measure in at the waist <math>\frac{3}{4}</math> inches.</p>	<p>Take your ruler, line it up at the waist, &amp; mark wherever <math>1 + \frac{1}{2}</math> inches lands on the side seam.</p>
		
<p>Square a line from the new side seam, the <math>1 + \frac{1}{2}</math> inches mark. Do not concern yourself with the length yet; just make it long enough to reach the front that you will draw in text.</p> <p>Measure down the front 3 inches.</p> <p>Measure down the back 4 inches.</p>	<p>Blend a smooth-curved waist.</p> <p>Connect the front to the curved portion of the front leg opening.</p> <p>Connect the back with a straight line.</p>	<p>Find the center of the back line &amp; measure <math>\frac{1}{2} + \frac{1}{2}</math> inches.</p>
		
<p>Draw a curved back leg.</p>	<p>Trace the new Bikini bottom.</p>	



## STRING BIKINI

	
<p>A Bikini that ties at the side is easy to draft.</p>	<p>Create the <b>Brazilian high-cut swimsuit bottom</b> draft as shown previously. Simply cut the pattern lower &amp; finish the waist edges with binding ties.</p>

## THONG, G-STRING, & T-BACK

	
<p>For the <b>Thong, G-string, or T-back</b>, lowers the waist 1+1/2 inches.</p>	<p>Draw a line parallel to the new waist, 1 inch lower.</p>
	
<p>Square the ends of the sides, using the smallest waist.</p>	<p>The <b>Thong</b> has a center strap that measures 1/2 inch total, 1/4 inch for each side, &amp; uses 2 X 1/4 inches elastic on each side.</p> <p>Shape the center back as required.</p>