

Measurement Worksheet

for stretch shorts

Original Measurements		Adjustment for Stretch	Adjusted Measurement
Waist		X .88	
Full Hip		X .88	
Thigh		X .88	
Rise		X .92	
Waist to Fullest Part of Hip		X .92	
Waist to Hem at Side		X .92	

***As you work through these instructions to create your short pattern be sure to refer to the Adjusted Measurements & not your original measurements.**

Adjusted Measurement		Further Calculations	Result
Waist		x .5	
Full Hip		x .5	
Full Hip		divided by 9	

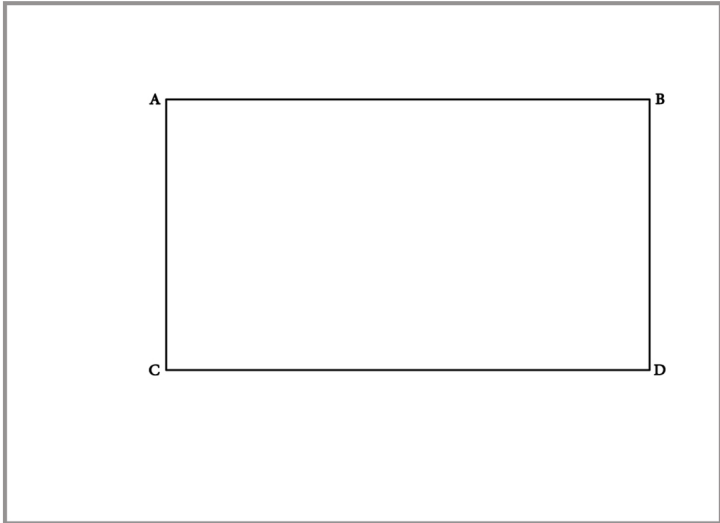
Half of Waist

Half of Full Hip - STEP (1)- points A-B & C-D

STEP (4) - point G

Half of Full Hip		Half of Waist	Result
	(-) minus		

Above Result ____ divided by 3 = ____ This is your Waist Dart for STEP (6)



1. Draw a box using your adjusted measurements from the calculation sheet.

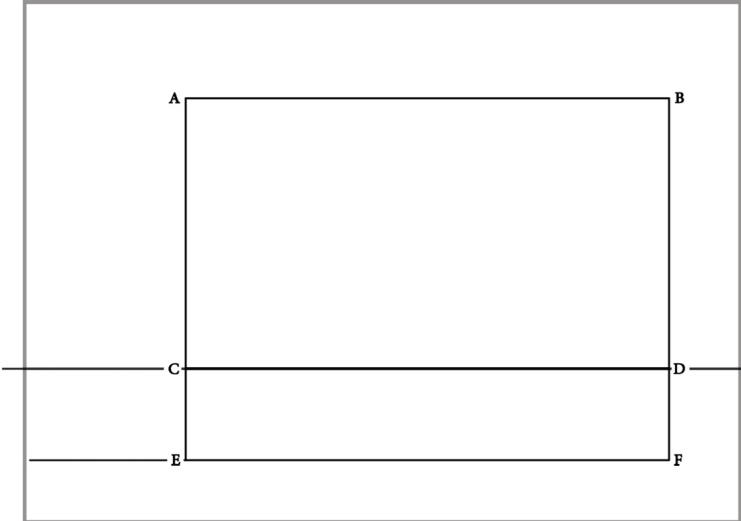
A-B & C-D = 1/2 of full hip
 A-C & B-D = rise

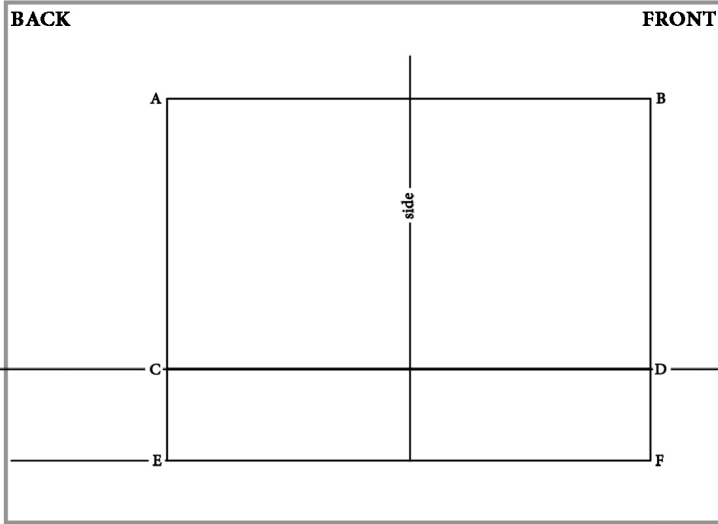
2. A-E & B-F = finished length of short

The space below the C-D line is the length of leg below the crotch of the short. (the inseam)

Connect all points as shown in the diagram to the right.

Extend points C & E 4" or 5" to the left.
 Extend point D 2" or 3" to the right,
 as shown in the diagram to the right.





3. Divide your completed rectangle in half vertically, as pictured in the diagram to the left.

This is the (side) of the short.

Extend the (side) line 1" or so above the top of your rectangle.

4. Mark point G to the left of point C 1/9th of the Full Hip measurement.

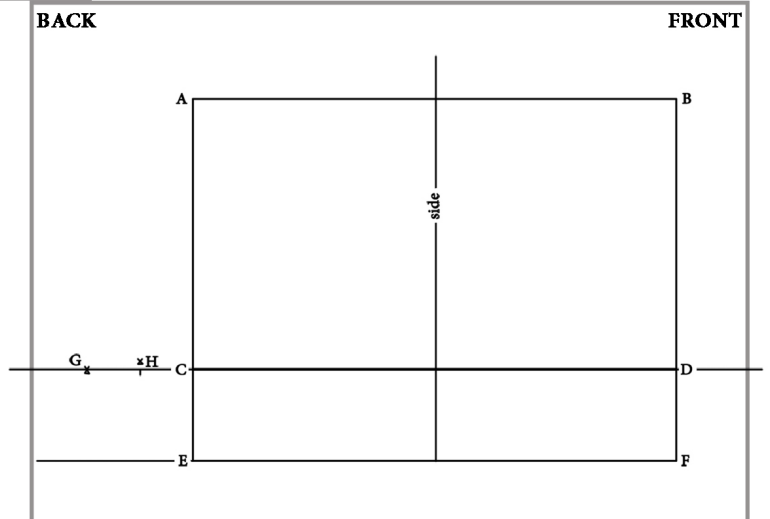
*Point G is determined on the measurement worksheet.

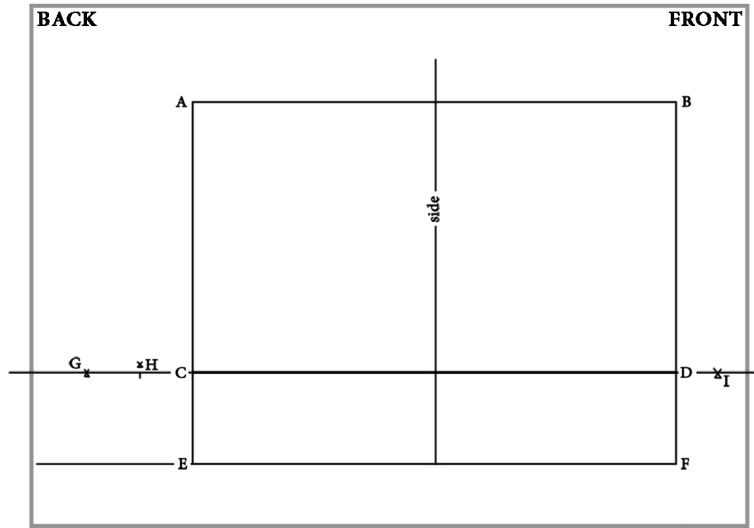
Mark point H.

It is centered between points C & G and is approximately 1/4" above the C-G line.

*The higher you place point H the less curve you will have at the back of the butt. So for a very flat butt try placing H 3/4" above the C-G line.

Experiment.





5. Mark point I to the right of D. This point is used later to complete the front crotch.

Using your adjusted full hip measurement from the measurement worksheet determine how far to the right of D to mark I. (info below)

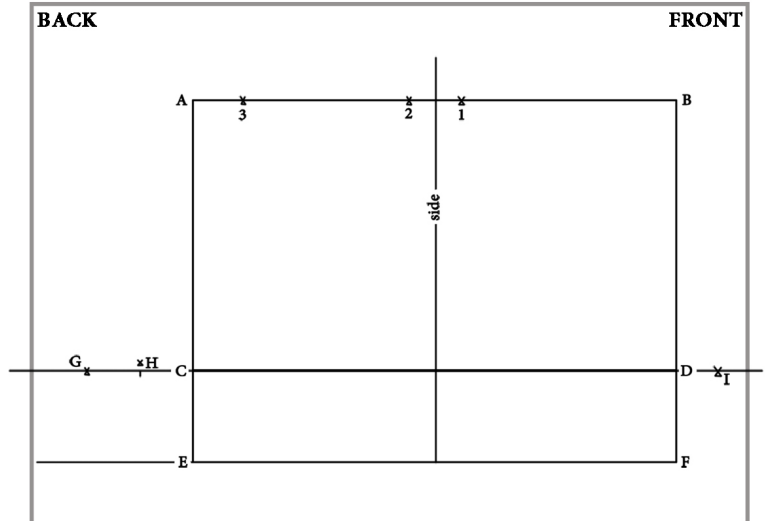
- < 28" - 1" to the right
- 28" to 32" - 1 1/4" to the right
- 33" to 36" - 1 1/2" to the right
- 36" to 40" - 1 3/4" to the right
- > 40" - 2" to the right

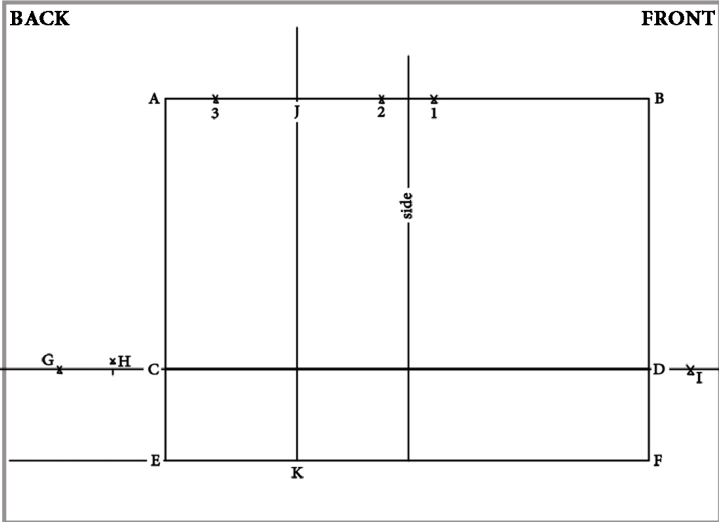
6. On the measurement worksheet you calculated the width of waist darts.

Points 1 & 2 are the waist dart measurement centered over the side line.

*For example if your waist dart measurement is 1 1/2" you would mark point 1 to the right of your side line 3/4" & point 2 to the left of your side line 3/4".

Point 3 is the waist dart measurement to the right of A.





7. Center point J between points 2 & 3.

Mark point K directly below J on the E-F line.

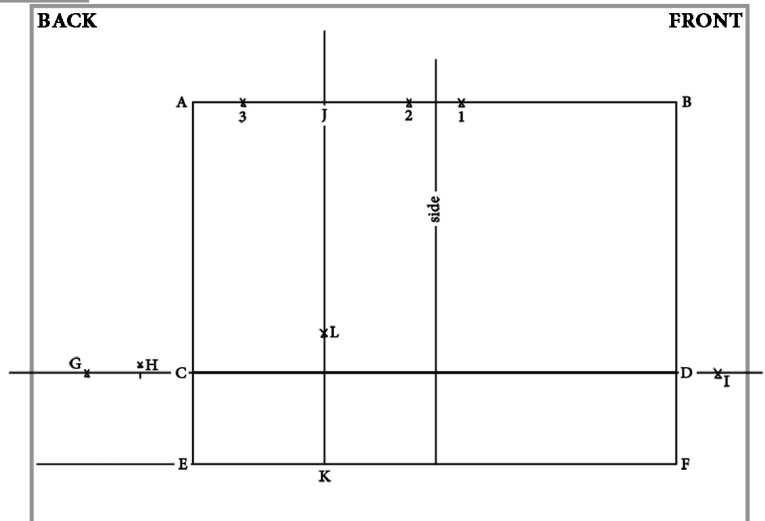
Connect points J & K, extend the line $1\frac{1}{2}''$ to $2''$ above the A-B line.

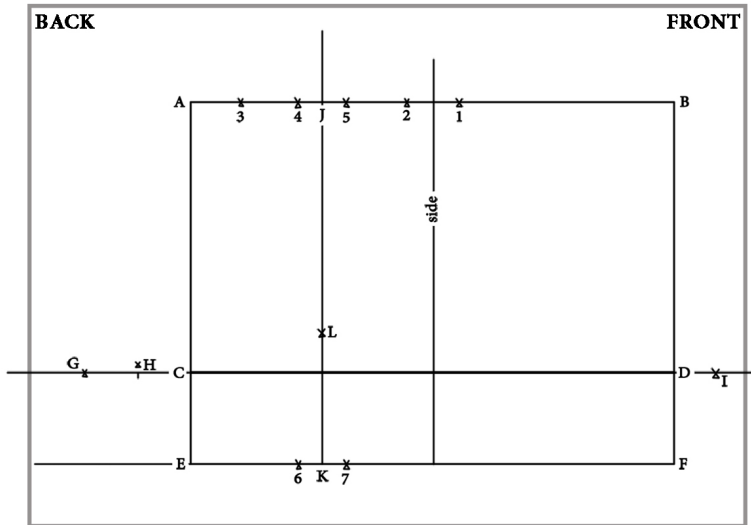
8. Mark point L on the J-K line.

Point L is marked below J the adjusted Waist to Full Hip measurement that you determined on the measurement worksheet.

*If you do not have this measurement mark point L below J $\frac{3}{4}$ of your adjusted Rise measurement.

Adjusted Rise ____ X .75 = ____



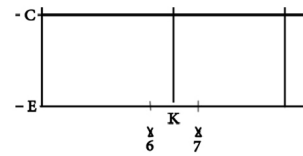


9. Center points 4 & 5 to either side of J the waist dart measurement.

Center points 6 & 7 to either side of K the waist dart measurement.

*If you are drafting shorts with an inseam less than 2.5" mark points 6 & 7 approximately 2.5" below the C-D line.

*see below



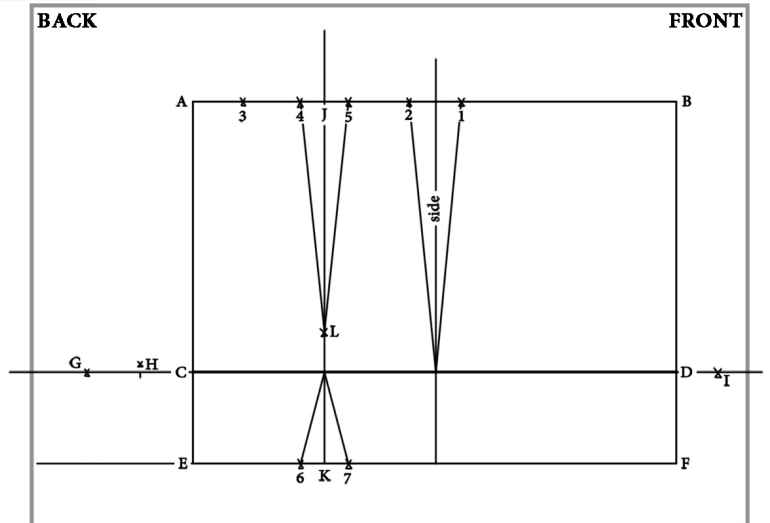
10. Create fitting darts.

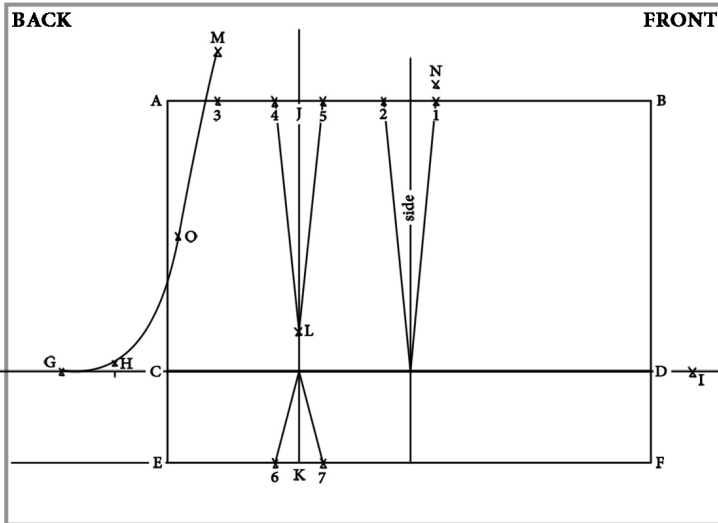
Connect points 4 & 5 to L

Connect points 6 & 7 to where the J-K line intersects the C-D line.

Connect points 1 & 2 to where the side line intersects the C-D line.

*Refer to diagram at the right.





13. Create the center back seam and the back crotch.

Connect points G, H and O with a curve.

Connect point O to M with a straight line or a slight curve.

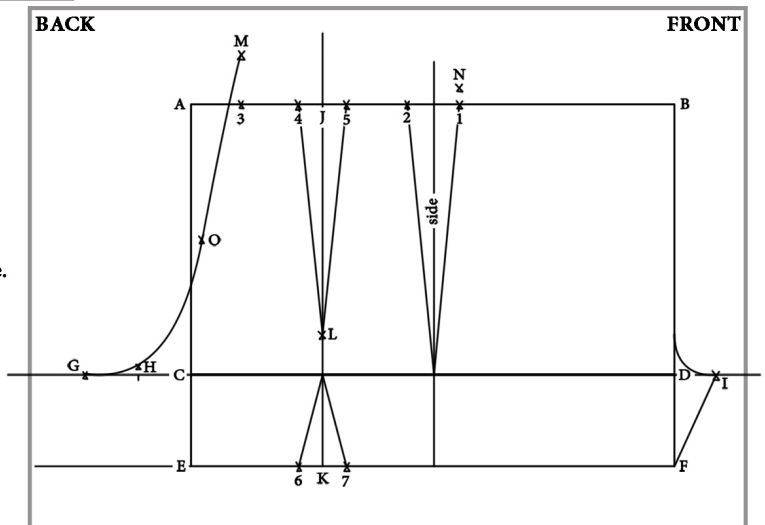
*It is possible to connect all the points (G, H, O & M) with a single curve.

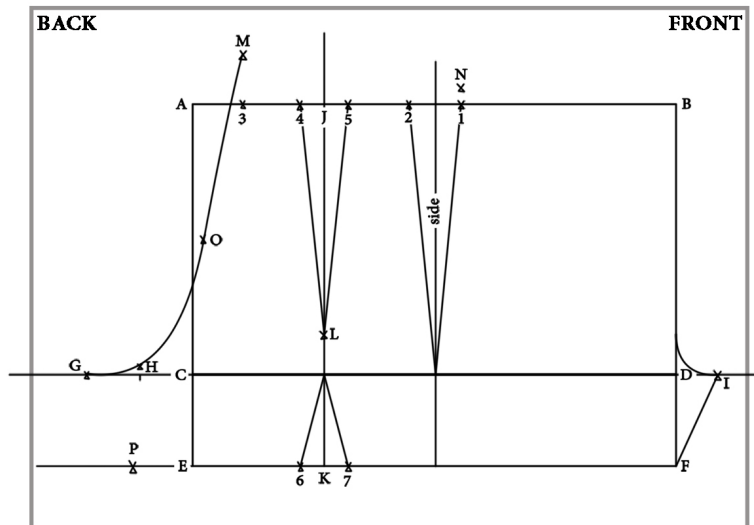
Use your judgement, it is okay for your line to stray a bit from points H & O.

14. Create the front crotch & the front inseam.

Draw a tight curve connecting point I to the bottom of the B-D line.

Connect point I to point F with a straight line.



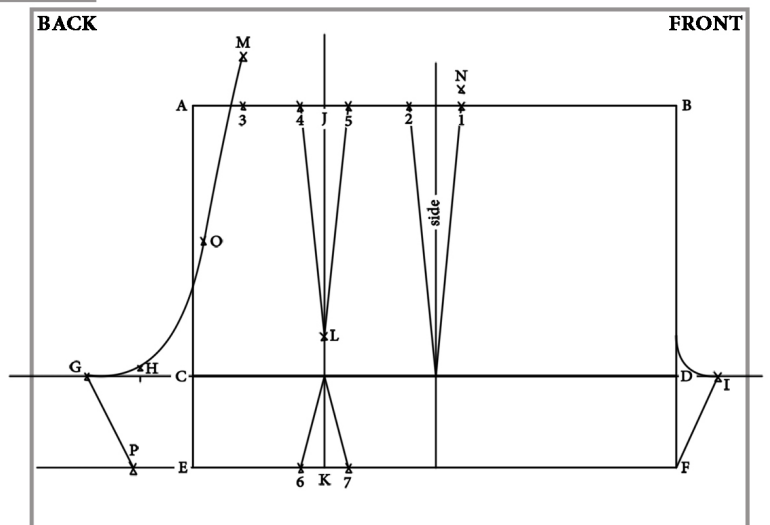


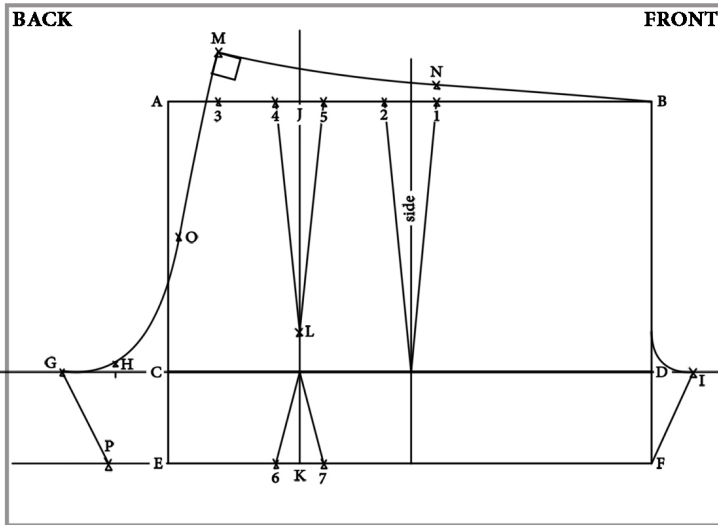
15. Mark point P to the left of F your adjusted thigh measurement plus the distance between points K & 6.

Your adjusted thigh measurement can be found on your measurement worksheet.

*For example if your adjusted thigh measurement is 16" and the distance between points K & 6 is 3/4" you would mark point P 16 3/4" to the left of F.

16. Connect points P & G with a straight line.





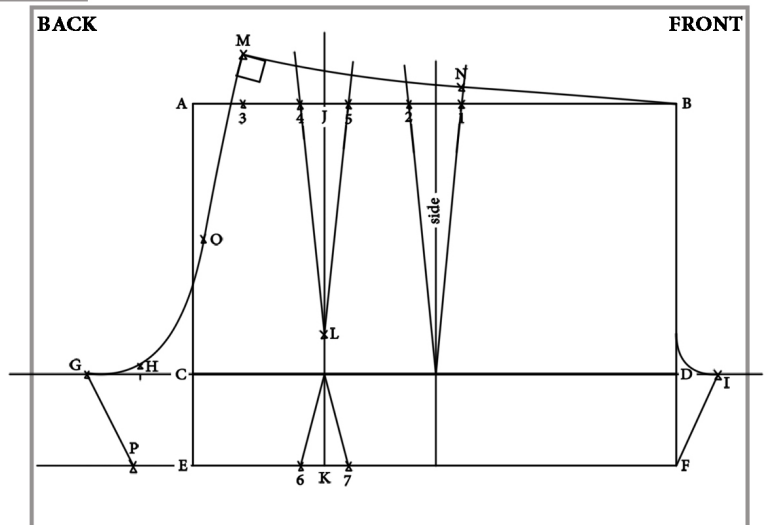
17. Create the waist of the pattern.

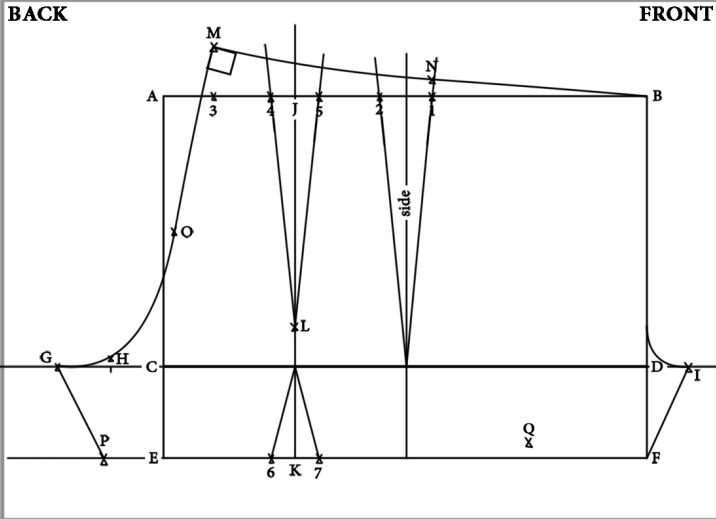
Connect points M, N & B with a soft curve.

*At point M make sure the first 1/2" or so of your waist line is perpendicular to your center back seam.

18. Extend the top of your waist darts to the waist line.

Continue points 1,2,4 & 5 up to the line you drew in step (17).





19. Mark point Q halfway between F and the side line & $\frac{3}{8}$ " to $\frac{1}{2}$ " above the E-F line.

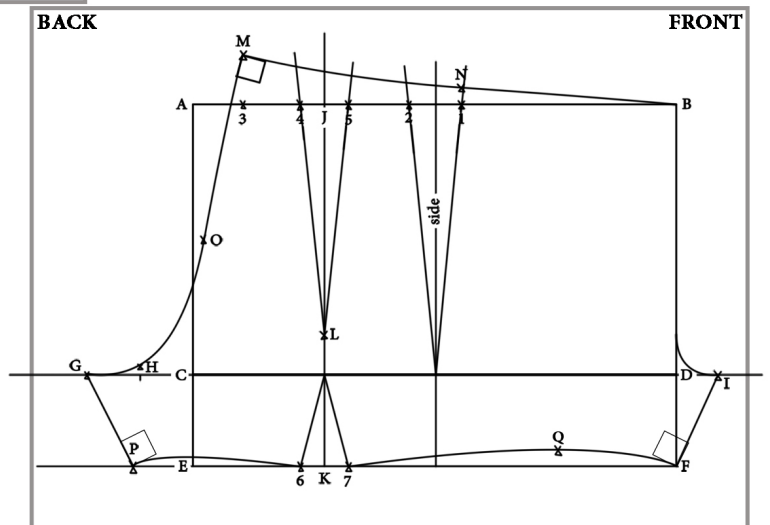
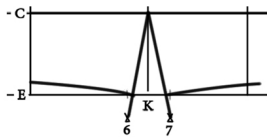
20. Create the leg line of the pattern.

Connect points P to 6 with a slight arc.

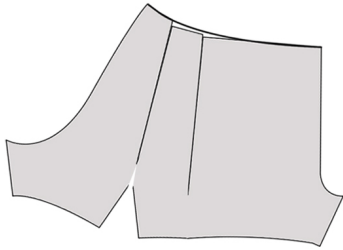
Connect points 7, Q and F with a slight arc.

*Make sure your leg line is perpendicular with points P & F for approximately $\frac{1}{2}$ ".

*If your points 6 & 7 are below the E-F line, mark you leg line to where the dart created by points 6 & 7 intersects the E-F line. (see below)

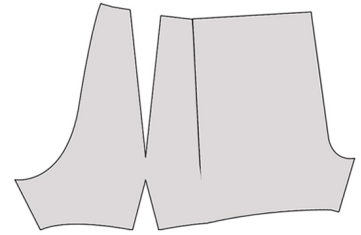
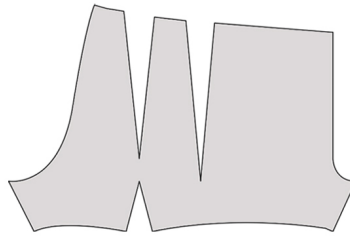


Basic Pattern Modifications

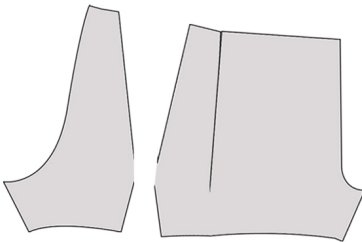


Before you cut the pattern out of your pattern paper you will want to true up the waist line. Fold your 2 waist darts together and redraw your waist line as shown above.

If you have horizontal stripes, vertical stripes, or a very bold definite pattern you may want to stitch your shorts using all of the darts.

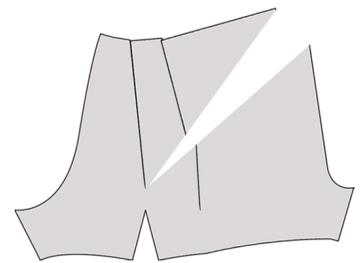
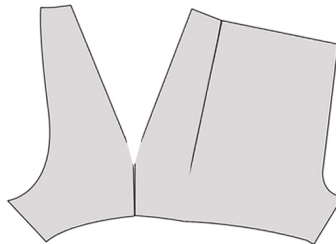


For most purposes you can close the side dart before you cut.

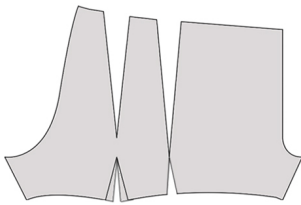


You can separate the front from the back.

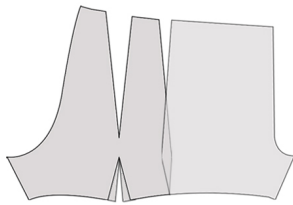
Close the front dart, and the thigh dart.



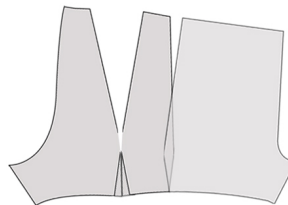
Explore dart manipulation. You can close a dart and release a dart anywhere. Your pattern will fit the same.



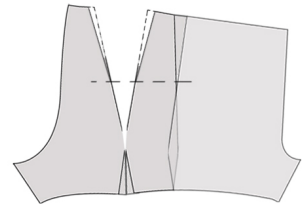
Move half of the thigh dart to the side of shorts.



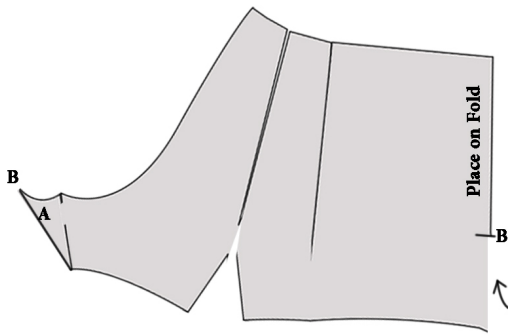
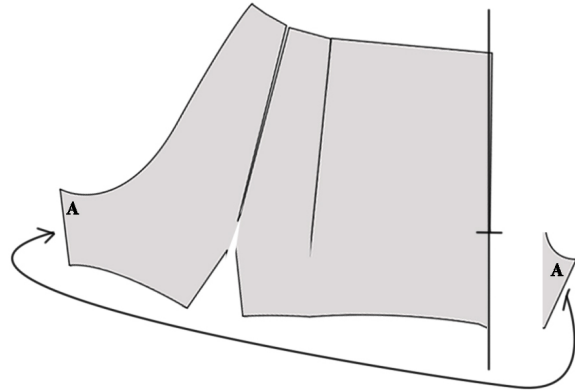
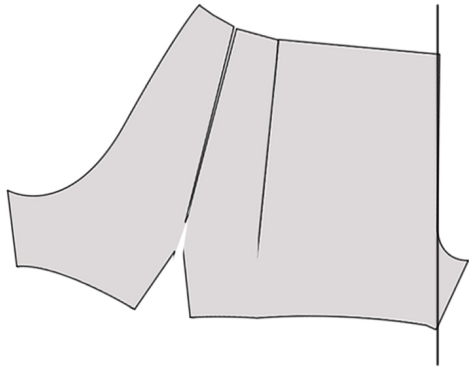
Close the side darts most of the way up.



Close the thigh dart.



Fill in the remaining side dart & remove that amount from the back dart.



To create shorts with no front seam (center front cut on the fold of your fabric), slice the front crotch off of the pattern and tape it to the back. Match the inseams together. On the front of your pattern mark the highest point where the front crotch was removed. This point is how high you slit up the folded fabric.

Slice fold open from hem up to B

