Swimsuit Bottoms - Meg Healy

- Select size refereeing the size chart and your hip circumference
 measurement. Remember the suit paper pattern should be SMALLER than
 you body, this is negative ease and the stretch in the spandex fabric will
 allow the pattern to stretch over your body and hold itself in place. Another
 way you can determine your ideal pattern size, is to grab a pair of your
 favorite fitting panties or other swimsuit bottoms with similar stretch
 qualities to your fabric and line it up to the matching pattern size line.
- Add seam allowance. These patterns DO NOT include seam allowances so you
 must add them yourself, this is a good thing to a lot of sewists, as you can add
 the amount YOU like to sew with, and accommodate the types of seams and
 finishes you want to do.
- Sewing with stretch fabric, you can't simply use a regular sewing machine and needle. You need the stitch to STRETCH with the fabric or else the seams will pop! You have a couple of different options: (1. Zig-zag or stretch stitch, 2. Stretch thread, 3. Or use an overlock machine/serger). If using a serger, make sure to test a seam and measure your serging stitch width, and then add that amount to the seams, then for zig-zagging, or a stretch stitch simply add 3/8".
- Now for the elastic. The leg holes as well as the waistline need to be elasticated. The rule is add the same width as your elastic to the areas that are to be elasticated. So if your elastic is ½" then add ½" to your size line.
- Next is to draft a gusset. If your swimsuit bottom pattern doesn't have a gusset, you will need to draft one. This is very simple to do. From your crotch line measure up about 4 ¼" along the center front and mark (Step 1.jpg). Then using a curved ruler, draw a curved line downwards towards your leg hole (Step 2.jpg). Make sure the curve intersects the center front at a 90-degree angle (Step 3.jpg). Place another clean piece of paper over top of the pattern and trace around the gusset line, center front to crotch, and then leg hole from crotch to gusset line. This is easier done after your seam allowances have been added so you don't have to add it on again. (Step 4.jpg). Lastly, fold the gusset along the center front line and cut around the edges to get one full gusset piece (Step 5.jpg).
- For the fabric, make sure you use a super stretch knit fabric with 4-way stretch. The fabric should have a 76 100% stretch factor with good recovery. Use the stretch and recovery gauge to determine this. Also make sure to stretch test both grainlines on your fabric as you need to determine the DOGS (direction of greatest stretch) and this helps place your pattern pieces on the fabric as the DOGS need to go ACROSS the body.
- Cut 1 of the front panty piece #5 on the fold, and also cut 1 of the back panty piece #6 on the fold, (DOGS going across the patterns). Then cut 2 of the draped piece #7, again with the DOGS going across the pattern. Draft piece c on another small piece of paper, or directly on the fabric and cut 1 for the front knot.

- Pin both piece #7 pieces, right sides together along the top and bottom line (Step 6.jpg).
- Stitch together and flip piece to the right side and then stitch of row of basting/gathering stitches along the sides leaving long thread tails for gathering (Step 7.jpg).
- Lay the sewn pieces on the right side of the front panty piece and gathering the sides to fit inside the front's side seam. Make sure you leave at least your elastic width both at the waist and leg hole edge (Step 8.jpg).
- Gather both sides, pin in place, and then baste to fronts inside seam allowance to hold gathers in place (**Step 9.jpg**).
- Fold the loop piece in half widthwise, and stitch together (**Step 10.jpg**).
- Flip to the right side and wrap around the gathered pieces at the center front and pin short edges together (**Step 11.jpg**).
- Stitch and trim the loop edges together, making sure that the loop is quite tight to hold the gathered center in place (Step 12.jpg & Step 12a.jpg).
- Lay the back panty pieces, right sides together with the front matching up the crotch lines (Step 13.jpg).
- Now lay the gusset piece, right side down on the back and pin together all three layers (the front, back, and gusset along the crotch line) (Step 14.jpg).
- Stitch the three crotch seam layers all together (**Step 15.jpg**).
- Flip the gusset piece AWAY from the back and lay on the front wrong sides together (**Step 16.jpg**).
- Pin leg hole edges together and baste to keep gusset in place until elastic goes on **(Step 17.jpg)**.
- Make sure to stitch inside the seam allowance line (Step 18.jpg)
- Pin the side seams of the front and back panties, right sides together matching up the waistline and leg hold edges (**Step 19.jpg**).
- Stitch together (Step 20.jpg).
- The gathers should now be caught in the side seam and now all that's left is to elasticate the waistline and leg holes (Step 21.jpg & Step 22.jpg).
- Place one pin holding the elastic to the wrong side of the leg hole at crotch seam (**Step 23.jpg**).
- Using one hand to SLIGHTLY pull JUST the elastic, stitch the elastic to the wrong side of each leg hole, overlapping at the crotch seam where the elastic was started and stopped (**Step 24.jpg**).
- Repeat for other leg hole and along the waistline, over and under lapping the elastic edges at one of the side seams (Step 25.jpg).
- Flip the elastic to the wrong side and topstitch the elastic in place from the right side catching the elastic underneath. I always like to topstitch from the right side as the stitch tends to look better than the bobbin thread (Step 26.jpg).
- On the leg holes and waistline, back stitch and stop at each draped piece, and then flip to other side and continue (Step 27.jpg & Step 28.jpg).

- Also while you are topstitching, slightly stretch the elastic as you did when
 initially stitching it on to allow it to cup to your body while wearing and
 avoid seam popping (Step 29.jpg).
- Finished! (Step 30.jpg)
- There are also a couple of other options for finishing/elasticating the waistline and leg holes.
- One way is toe draft an almost waistband finish for the top edge. Draft two rectangles 2" wide and then 2" SHORTER than the front and back waistline. Then stitch them together along the short side seams (Step 31.jpg).
- Once the bands are sewn together along the sides, fold in half widthwise matching up the two edges and stitch to the top of the panties matching up the side seams. Stretch just the band pieces as this acts as the "elastic", and not that this seam will be three layers (2 edges of the band folded, and then the waistline of the panties). Once sewn flip upwards (Step 32.jpg).
- If you find decorative elastic you can stitch on exposed elastic that will both elasticate your leg hole and add some visual interested and contrast. First stitch the elastic right sides together with your panties still stretching JUST the elastic (Step 33.jpg).
- Then flip the elastic away from the panties and topstitch in place from the right side (**Step 34.jpg**).