

Name: _____

Pattern Design Activities for Kids

by Don McCunn

Book Four - Sewing Projects

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Introduction to Sewing



These pages are divided into three sections. The first describes techniques for both hand and machine sewing. The second section focuses on the basics of hand sewing. Some of the hand techniques may come in handy even when using a sewing machine. The third section has machine sewing techniques.

All the projects shown were made from repurposed fabric. Black thread was used to make the stitches easy to see.



Hand Sewing



Machine Sewing



Gathers



Zippers



Curved Seam



Pleats

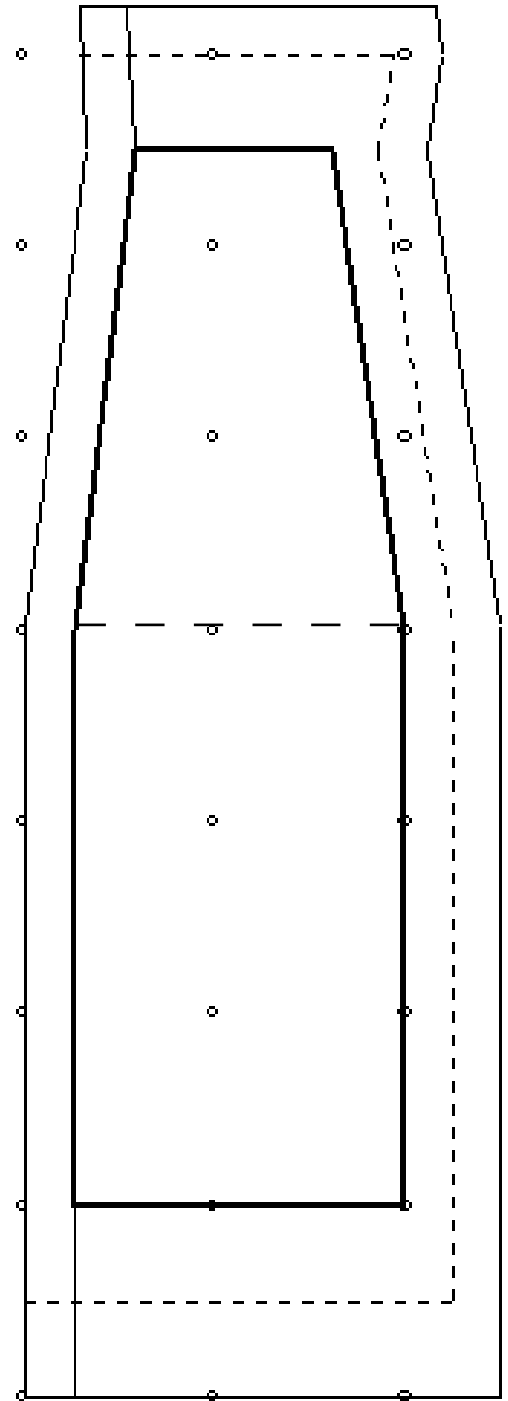
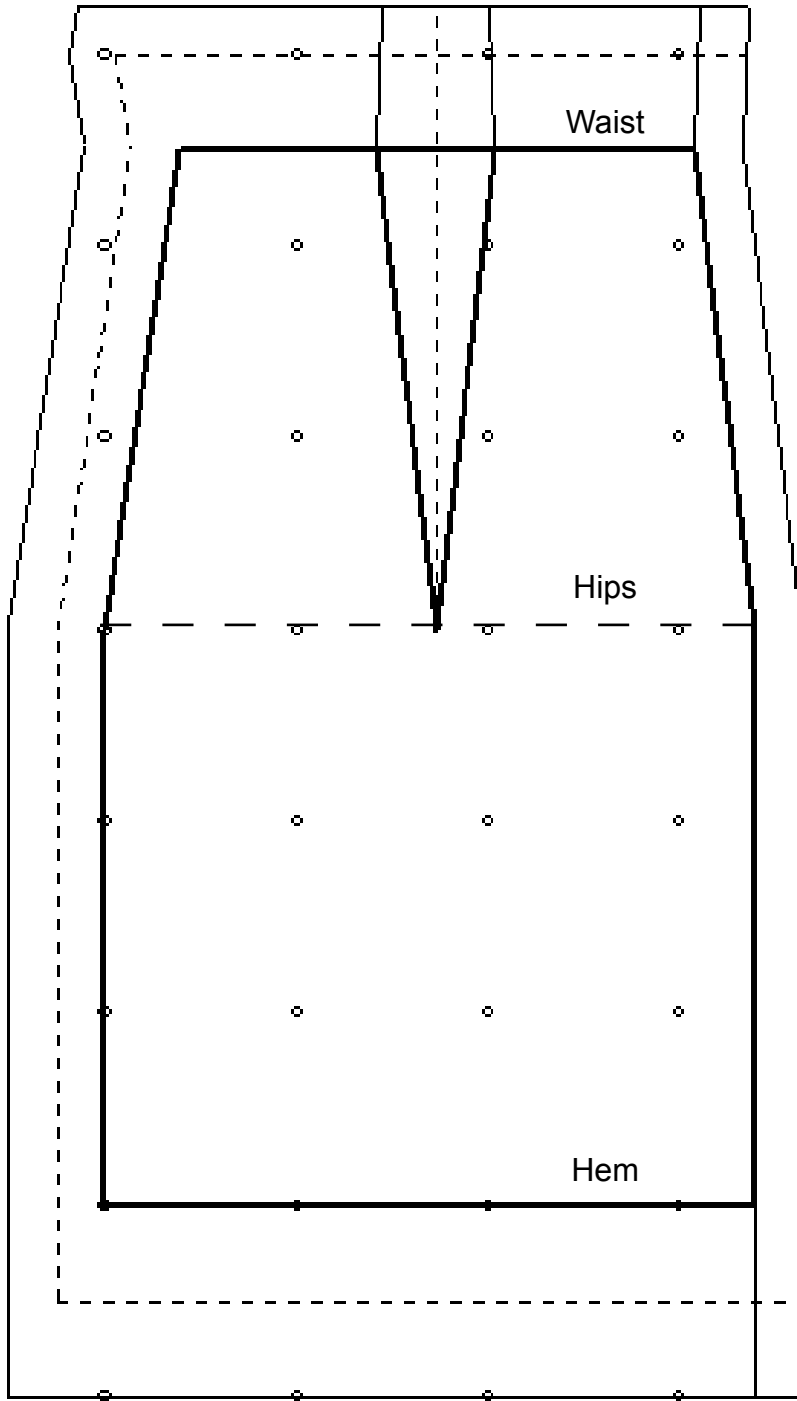


Pockets Sewing



Pockets Brushes

Sewing Patterns



8" by 10" (25.4cm by 20.3cm)

Sewing Supplies and Tools



The sewing supplies and tools you need for these projects are shown below.



Fabric



Thread



Needles



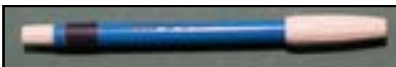
Pins



Copy and Tracing Paper



C-Thru Ruler



Marks-Be-Gone Pen



Tracing Wheel and Paper



Steam-A-Seam

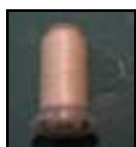


Iron



Sleeve Board or Ironing Board

Supplies and Tools for Machine Sewing



Fusible Thread



Hem and Zipper Presser Feet



Zipper

Seam & Sewing Allowances



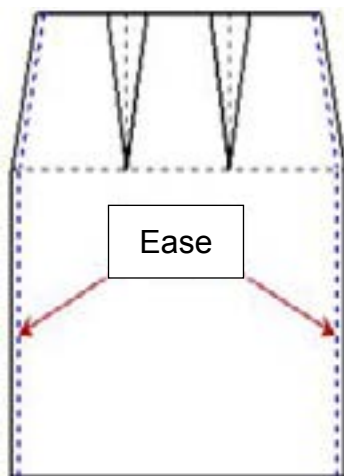
Previously projects were held together with tape. To use thread, pattern shapes must be expanded to make room for:

- Seam Allowances to hold separate pattern shapes together.
- Edge Finishes to prevent fraying.
- Hem Allowances to finish the bottom.

Darts also require extra fabric.

The patterns for these sewing projects are on page 3. They are ready to sew. If a printer is not available, you can use the Master Pattern from the previous projects, trace it, and make your own patterns.

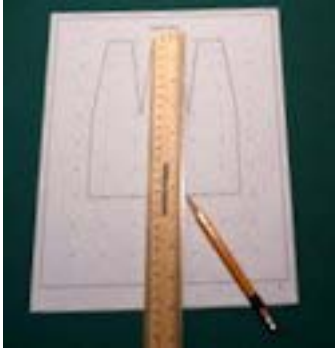
Adding Ease



When the Master Pattern is used for a skirt, the pattern needs to be expanded so it will easily slip over the bottle. This extra allowance is called ease. It should be added to both sides of the Master Pattern before the seam allowances are added. For this project add 1/8" (.3cm) of ease to both sides of the Master Pattern as shown above. Ease has already been added to the provided patterns.

Seam & Sewing Allowances, cont'd

Creating Original Pattern Designs



1. On a copy of the Master Pattern, draw the design lines.



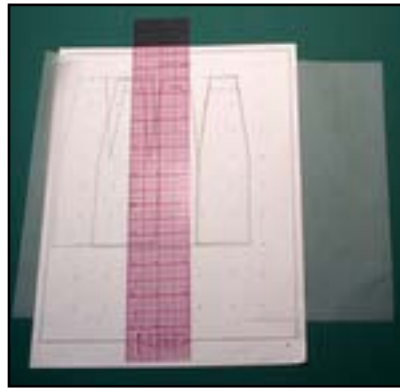
2. Place a second piece of paper on top of the Master Pattern.



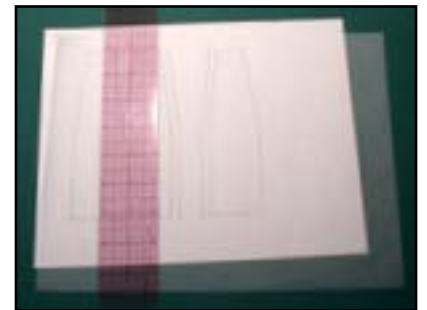
3. Trace the first pattern shape including any darts.



4. Shift the paper over to expose the next pattern shape.



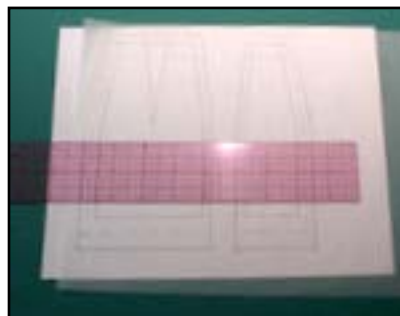
5. Trace the second pattern shape including any darts. Continue shifting the paper to trace any remaining pattern shapes.



6. Add seam allowances to all pattern edges which will be sewn together.



7. Add edge allowances to the outside edges.



8. Add Hem Allowances to the bottom.



9. Cut the pattern pieces.

Cutting Fabric



1. Select a piece of fabric that is a little larger than the patterns.



2. Matching the patterns to the grain of the fabric, pin the pattern pieces.



3. Before cutting, turn the fabric over to make sure it is flat.



4. To mark the darts, place a piece of tracing paper between the pattern and the fabric.



5. Use a tracing wheel to mark the dart on the fabric.

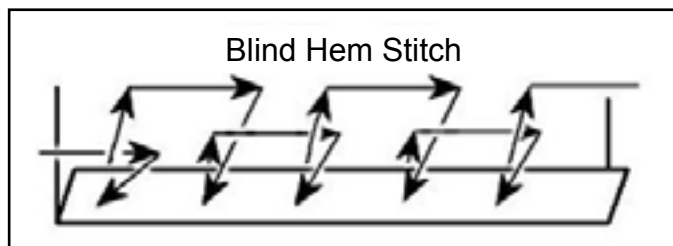
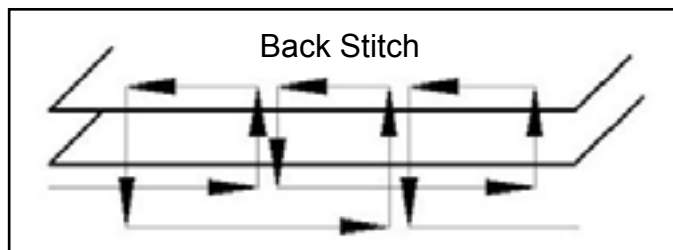
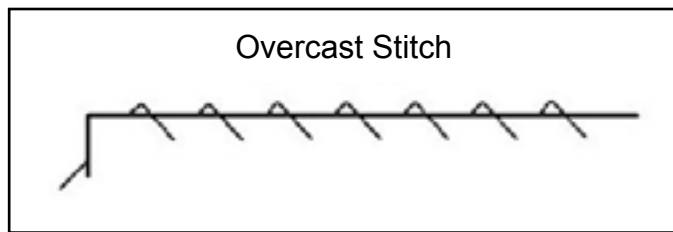
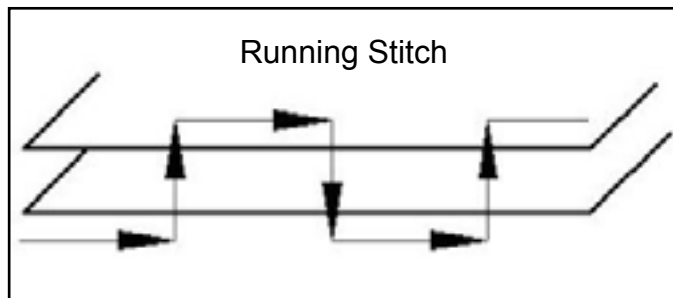


6. Remove the pins holding the pattern pieces to the fabric.

Hand Sewing



Hand sewing only requires fabric, thread, needle, and scissors. These projects use four basic hand sewing techniques.



Hand Sewing Darts



Darts remove a “V” shape from the fabric. The sides of the dart are called dart legs. They are marked on the fabric when it is cut, see page 7. To sew the dart, fold it in half placing one dart leg on top of the other, then pin the fabric. Look at both sides of the fabric to make sure the pin is going through both dart legs.



1. Fold the dart along the dart center line.



2. Pin the legs of the dart looking at both sides to make sure the pin is going through both legs.



3. Knot the end of the thread, then begin stitching from the point of the dart.



4. Sew a line of running stitches along the dart leg.



5. To create a knot, sew the last stitch twice, then loop the thread over the needle and tighten.



6. Clip the thread, then press the dart to one side.

Hand Sewing Seams



When sewing seams, there are two steps. First, prevent fraying by finishing the edges with an overcast stitch. Then use a running stitch to sew the pieces together.



1. Overcast the outside edges of the seam allowance.



2. Press the overcast edges.



3. Using a C-Thru ruler and a Marks Be Gone pen or pencil, draw in the seam line.



4. Matching the edges of the seam allowance, right sides together, pin the pieces together.



5. Using a running stitch, sew the seam.



6. Remove the pins and press the seam open.

Hand Finishing Edges



The fabric's outside edges should be turned under to prevent fraying. A product that makes this easy is 1/4" (.6cm) Steam-A-Seam. This tape has two sides that are sticky. Adjust and readjust the tape as necessary, then press for a permanent finish.



1. Press the Steam-A-Seam to one edge of the fabric.



2. Pull off the Steam-A-Seam backing.



3. Fold the fabric over the Steam-A-Seam tape.



4. Hold the iron on the folded edge for about 10 seconds.



5. Fold the fabric a second time, then press.



6. Using a running stitch, sew the edges in place.

Hand Finishing Edges, cont'd



7. Using Steam-A-Seam, finish the top edge of the fabric by folding it over.



8. Pin the top of the project over a waist elastic.



9. Use a back stitch to sew the waist band in place.

Hand Sewing Hems



A blind hem stitch is the least visible stitch on the outside. Hand basting the hem in place leads to the best results.



1. Fold the hem over twice, then pin it in place.
2. Baste the hem in place.
3. Remove the pins.



4. To hide the knot in the thread, sew the initial stitch through the hem only.
5. Sew a small stitch through the front of the fabric, then continue the stitch through the top of the hem. Make sure the thread loops underneath the point of the needle.
6. Continue these stitches across the hem, then remove the basting.

Machine Sewing



Darts



Seams



Edge Finishes

Threading the Machine

When threading a machine, it is important for the thread to go from the spool through the tension plates, over the lift arm, and through the needle. The machine's guides ensure the thread follows the correct path. Every machine is different. Check the owner's manual for your machine's specific steps.



1. From the back, pull the thread off the spool and through guide #1.



2. From the front, pull the thread over the tension plates on the top of the machine.

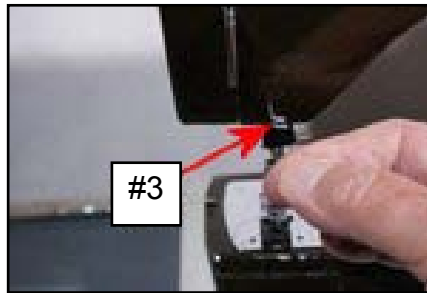


3. Pull the thread up through guide #2

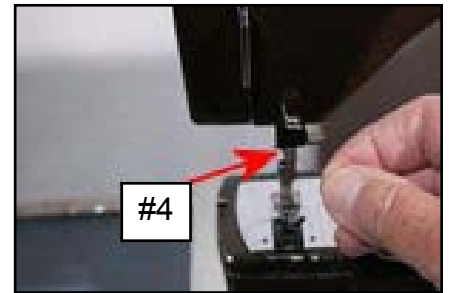
Threading the Machine, cont'd



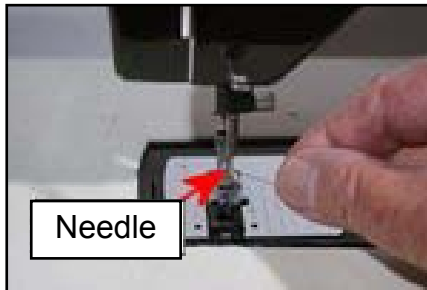
4. Pull the thread over the take up lever.



5. Feed the thread through guide #3.



6. Feed the thread through guide #4 just above the needle.



7. Insert the thread through the needle.

Machine Sewing Darts



The sides of the dart are called dart legs. They are marked on the fabric when it is cut, see page 7. To sew the dart, fold it in half placing one dart leg on top of the other, then pin the fabric. Look at both sides of the fabric to make sure the pin is going through both dart legs.



1. Fold the dart along the dart center line.



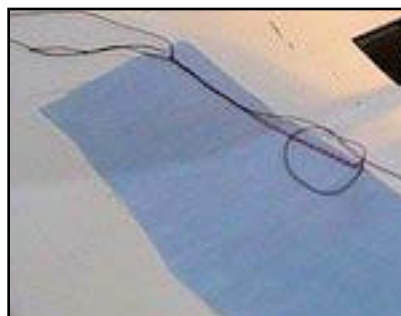
2. Pin the legs of the dart looking at both sides to make sure the pin is going through both legs.



3. Start sewing the dart at the top with three or four reverse stitches.



4. Sew to the point of the dart, keeping the last two or three stitches parallel to the center line.



5. Remove the fabric from the machine leaving at least 3" (8cm) of thread beyond the point. Tie three overhand knots over the point.



6. Press the dart to one side.

Machine Sewing Seams



When sewing seams, there are two steps. First, prevent fraying by finishing the edges with a zigzag stitch. Then use a regular stitch to sew the pieces together.



1. In the seam allowance, use a Marks Be Gone pen to mark the location of the hip line.



2. To finish the outside edges of the seam allowance, sew a line of zigzag stitches, then iron.



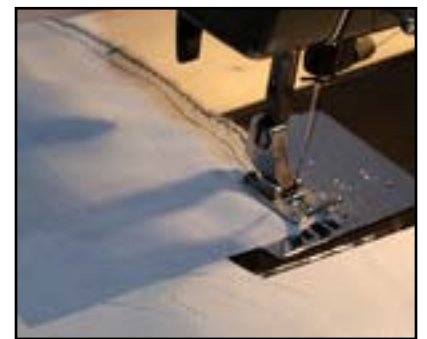
3. Matching the edges of the seam allowance, right sides together, pin the pieces together.



4. Start sewing the seam with three or four back stitches.



5. Remove the pins as you sew the seam.



6. Finish the seam with three or four back stitches, then press the seam open.

Machine Finishing Edges



Fabric's outside edges should be turned under to prevent fraying. A product that makes this easy is 1/4" Steam-A-Seam. This tape has two sides that are sticky. Adjust and readjust the tape as necessary, then press for a permanent finish.



1. Press the Steam-A-Seam to one edge of the fabric.



2. Pull off the Steam-A-Seam backing.



3. Fold the fabric over the Steam-A-Seam tape.



4. Hold the iron on the folded edge for about 10 seconds.



5. Fold the fabric a second time, then iron.



6. Sew the edge in place with a straight stitch.

Machine Finishing Edges, contd



7. Sew a line of machine basting 1/4" (.6cm) down from the fabric's top edge.



8. Sew a line of machine basting 3/4" (2cm) down from the fabric's top edge.



9. Fold the fabric at the 1/4" (.6cm) basting from Step 7.



10. Fold the fabric a second time at the basting from Step 8.

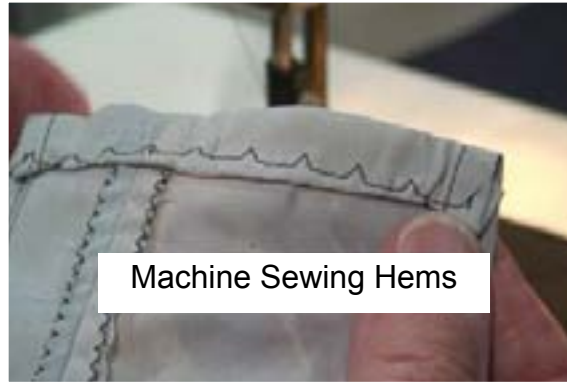


11. Pin the fabric over a waist elastic.



12. Sew the fabric over the elastic.

Machine Sewing Hems



The blind hem stitch sews several straight stitches, then a single zigzag. This stitch requires a special blind hem presser foot. Machine baste the hem in place prior to sewing the blind hem stitch. To machine baste, set the stitch length to the longest length.



1. Sew a line of machine basting 1/2" (1.2cm) up from the bottom of the fabric.



2. Sew a second line of machine basting stitches 1" (2.5cm) from the bottom of the fabric.



3. Fold the fabric along the two basting stitches from Steps 1 and 2, then pin in place.



4. To hold the hem in place, sew another line of machine basting down the middle. Then remove the pins.



5. Set the controls for the blind hem stitch and install the blind hem presser foot.

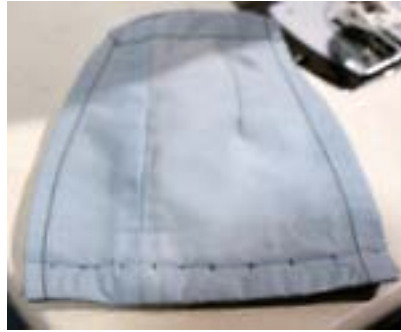


6. Fold the fabric back to expose just a little of the top of the hem.

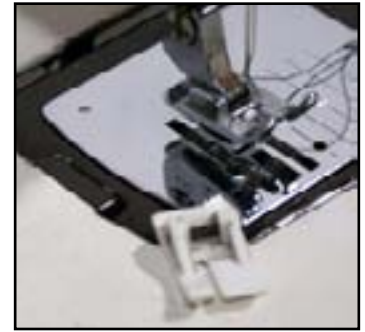
Machine Sewing Hems, cont'd



7. Sew using the blind hem stitch.



8. Remove the machine basting.



9. Restore the machine to the normal stitch. Replace the blind hem presser foot with the regular presser foot.

Sewing Gathers



There are three steps for adding a gathered trim to the main body of a project.

1. Prepare the fabric.
2. Sew a Rolled Hem at the bottom of the trim, see page 23.
3. Gather the trim, see page 24.

For this project, use the pattern that has two darts and no seam, see page 25.

Prepare the Fabric

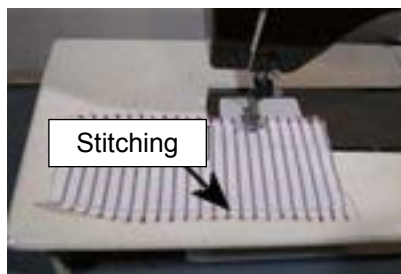


1. Cut the pattern for the body out of fabric. Sew the darts and edges as shown in the earlier videos.
2. For the trim, rip off a length of fabric that is 3" (8cm) wide.
3. Cut the length of the trim fabric so it is one-and-a-half times longer than the length of the bottom of the body.

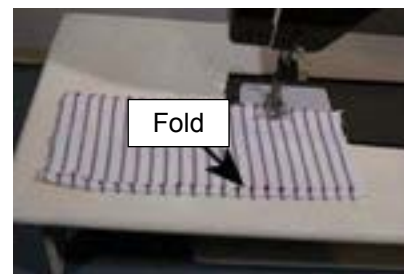
Sew a Rolled Hem



1. Put a bobbin with fusible thread into the sewing machine.



2. Sew a line of stitching, the good side up, 1/4" (.6cm) from the edge of the trim fabric.



3. Fold the trim fabric so stitching from the good side is just visible along the folded edge. The fusible thread should be inside this fold.



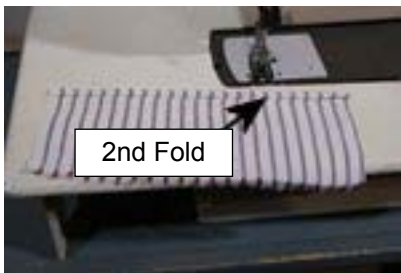
4. Holding the iron in place for 10 seconds, press the edge of the fabric. Move the iron and repeat this process until the full length of the fabric has been ironed.



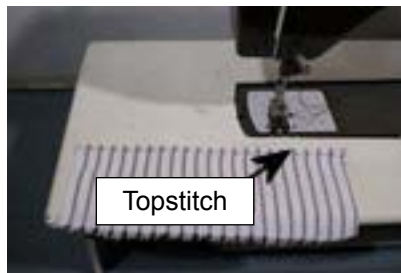
5. Trim off the excess fabric as close to the stitching as possible.



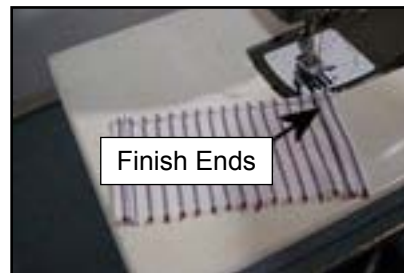
6. Change the bobbin in the sewing machine back to regular thread.



7. Fold the hem over a second time and press.

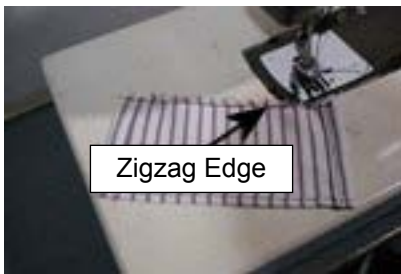


8. Sew a line of top stitching to hold the hem in place.



9. Finish the ends of the fabric as described in Edge Finish, see page 18.

Add Gathers



1. To finish the top edge of the trim, sew a line of zigzag stitches.



2. Sew a line of basting 1/4" (.6cm) from the top edge of the trim.



3. Sew a second line of basting 3/4" (2cm) from the top edge of the trim.



4. Find the center of the trim and mark it with a pin.



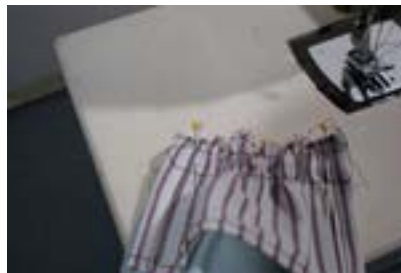
5. Hold the basting's two top threads and push the fabric toward the center.



6. On the fabric for the body, find the center of the hem and mark it with a pin.



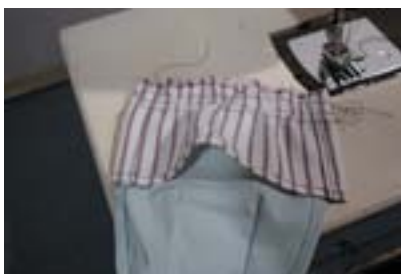
7. Hold the gathered trim to the body's bottom, good sides together, and pin the centers.



8. Pin the ends of the trim to the body and pin in place.



9. Adjust the gathers evenly and pin in place.



10. Using a 1/2" (1.2cm) seam allowance, sew the trim to the body.

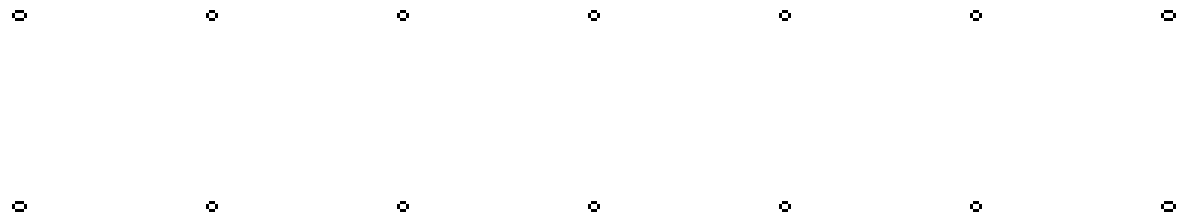
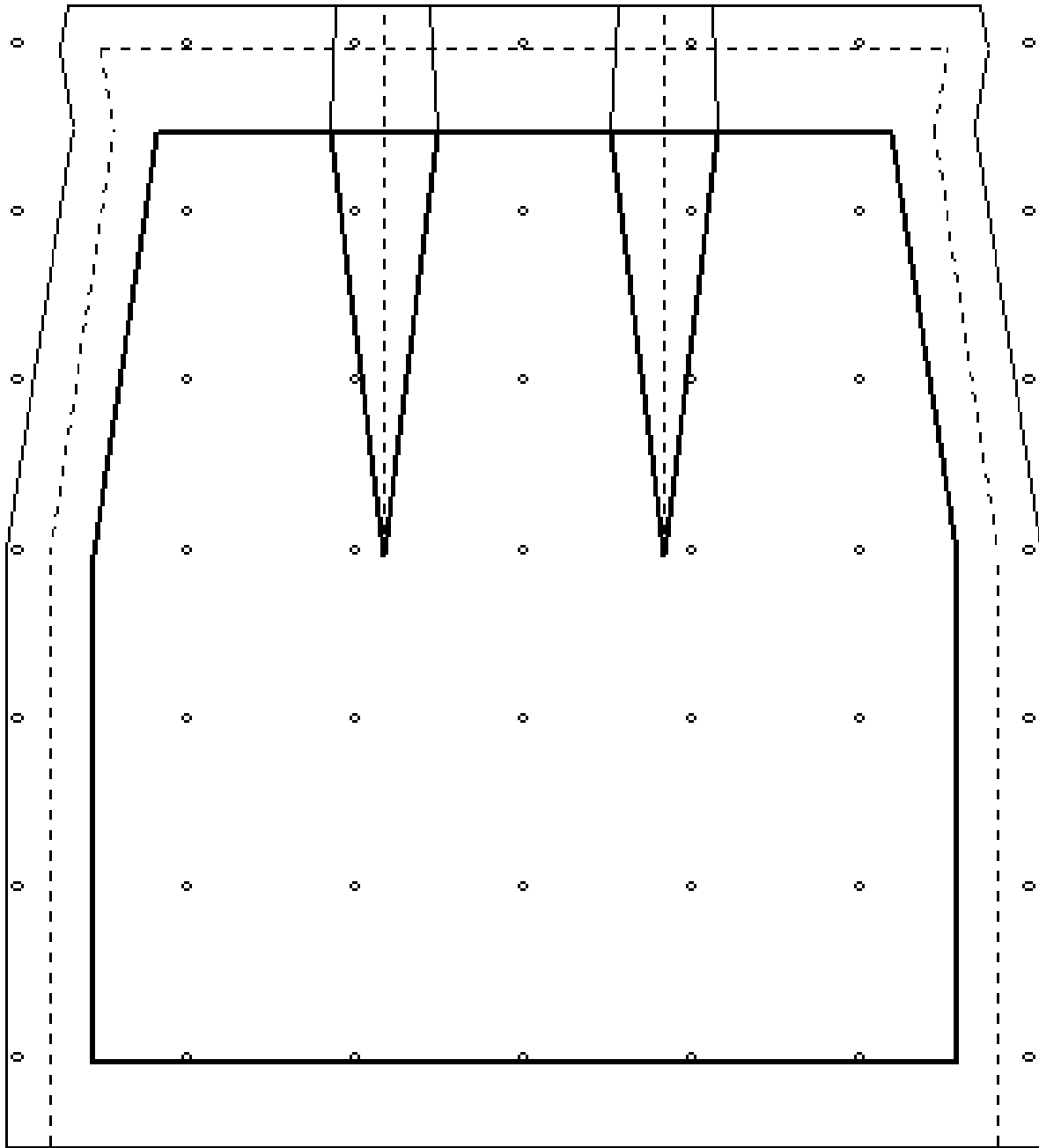


11. Remove the two lines of basting.



12. Fold the seam allowances toward the body and press in place.

Pattern for Gathers



8" by 10" (25.4cm by 20.3cm)

Sewing Zippers



This project is for a skirt with a zipper. Zippers work best in straight seams so the pattern for the back of the skirt is divided in half down the middle with a 1/2" (1.2cm) seam allowance to match the width of the zipper, see page 29. The pattern for the front remains the full width of the Master Pattern and includes two darts, see page 28.

This project requires a zipper and zipper foot. The exact length of the zipper used is not important as any extra length can be cut off. The zipper pull, however must be face down on the seam allowance in order to open and close the finished project.



1. Cut the patterns out of fabric, then, zigzag, and pin the two pieces along the center back seam, good sides together.
2. Put two pins just below the Hip line to indicate where the zipper will end.
3. Baste from the top of the skirt down to the two pins.

Sewing Zippers, cont'd



4. Sew a line of regular stitching from the two pins down to the bottom of the skirt.



5. Press the seam open.



6. Pin the zipper to the top of the skirt with the zipper pull touching the seam.



7. Keeping the teeth of the zipper centered over the seam, pin the zipper to the seam allowance.



8. Hand baste the zipper to the skirt, then remove the pins.



9. Install the zipper presser foot.



10. Starting from the top, sew both sides of the zipper to the skirt.

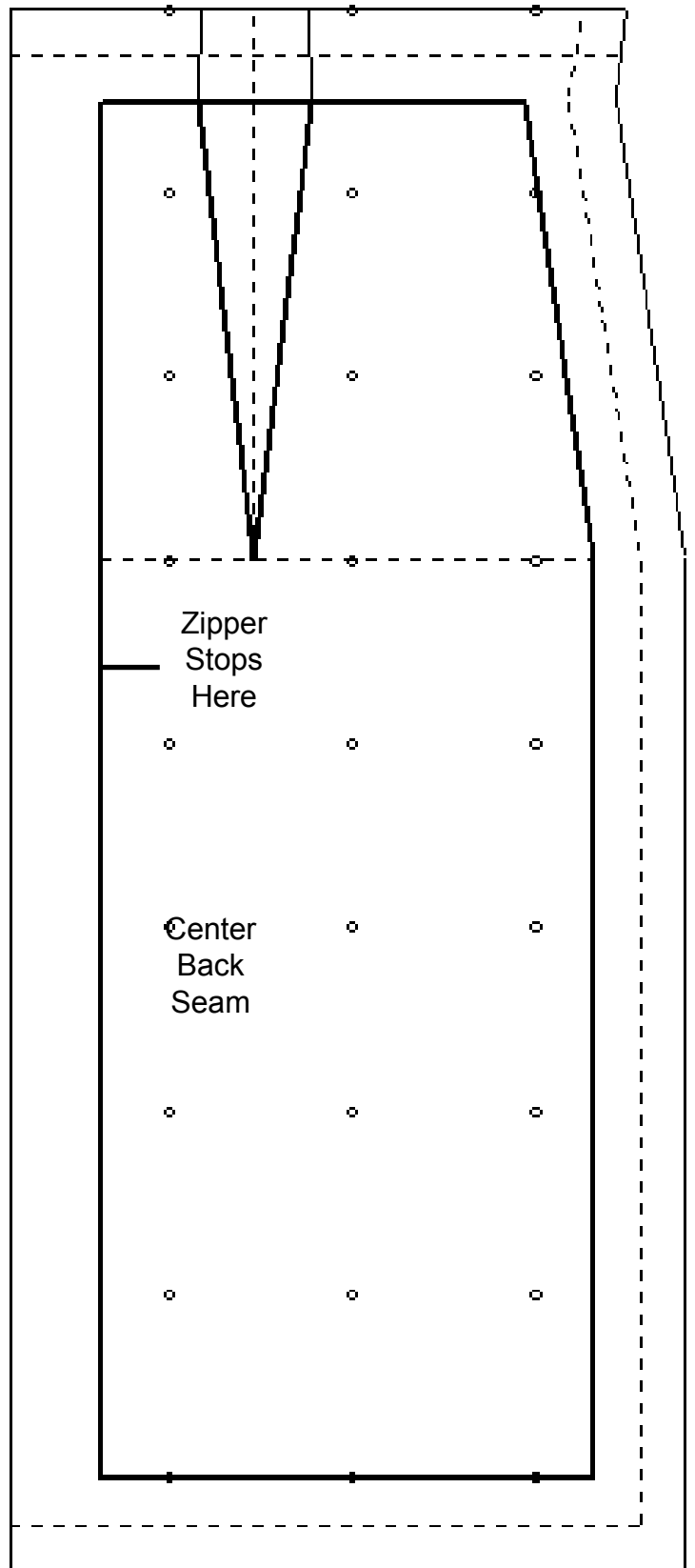
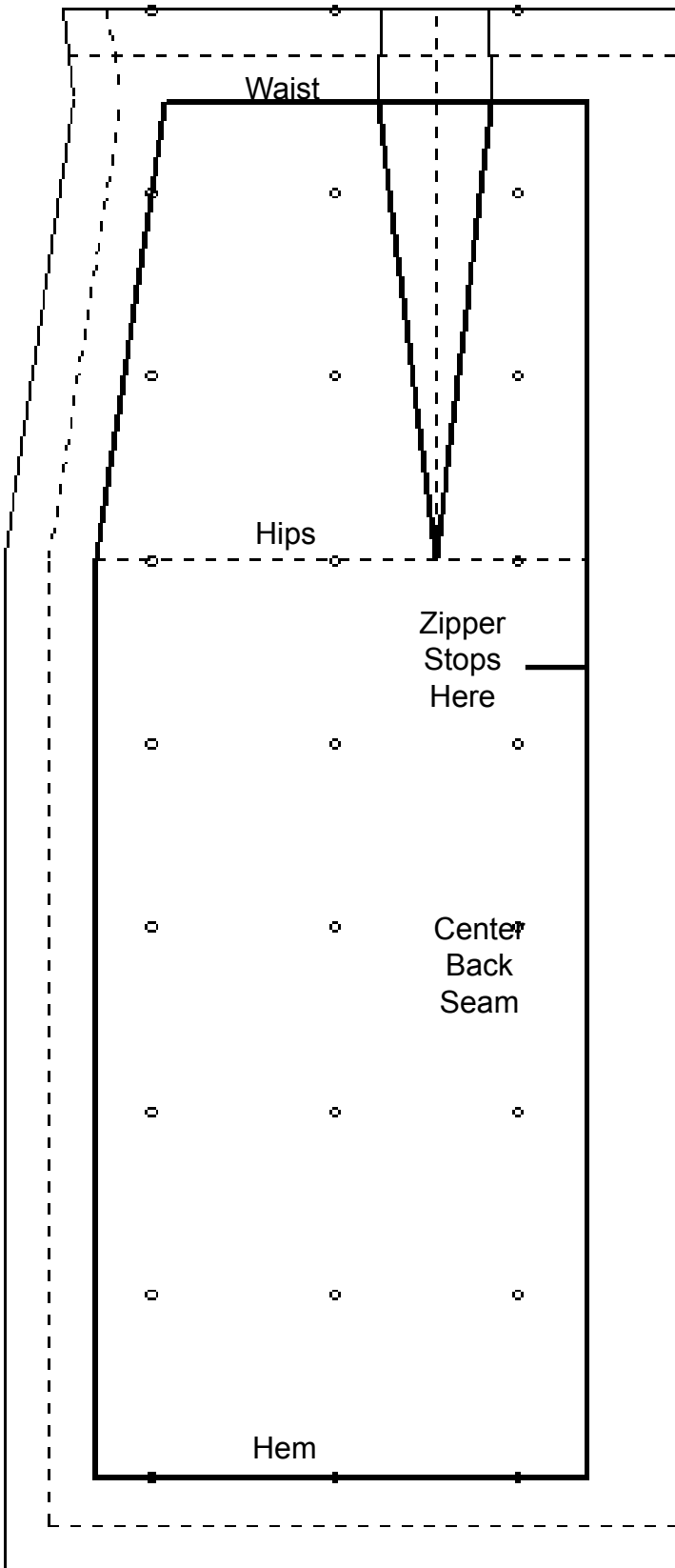


11. Remove the basting and try opening the zipper.



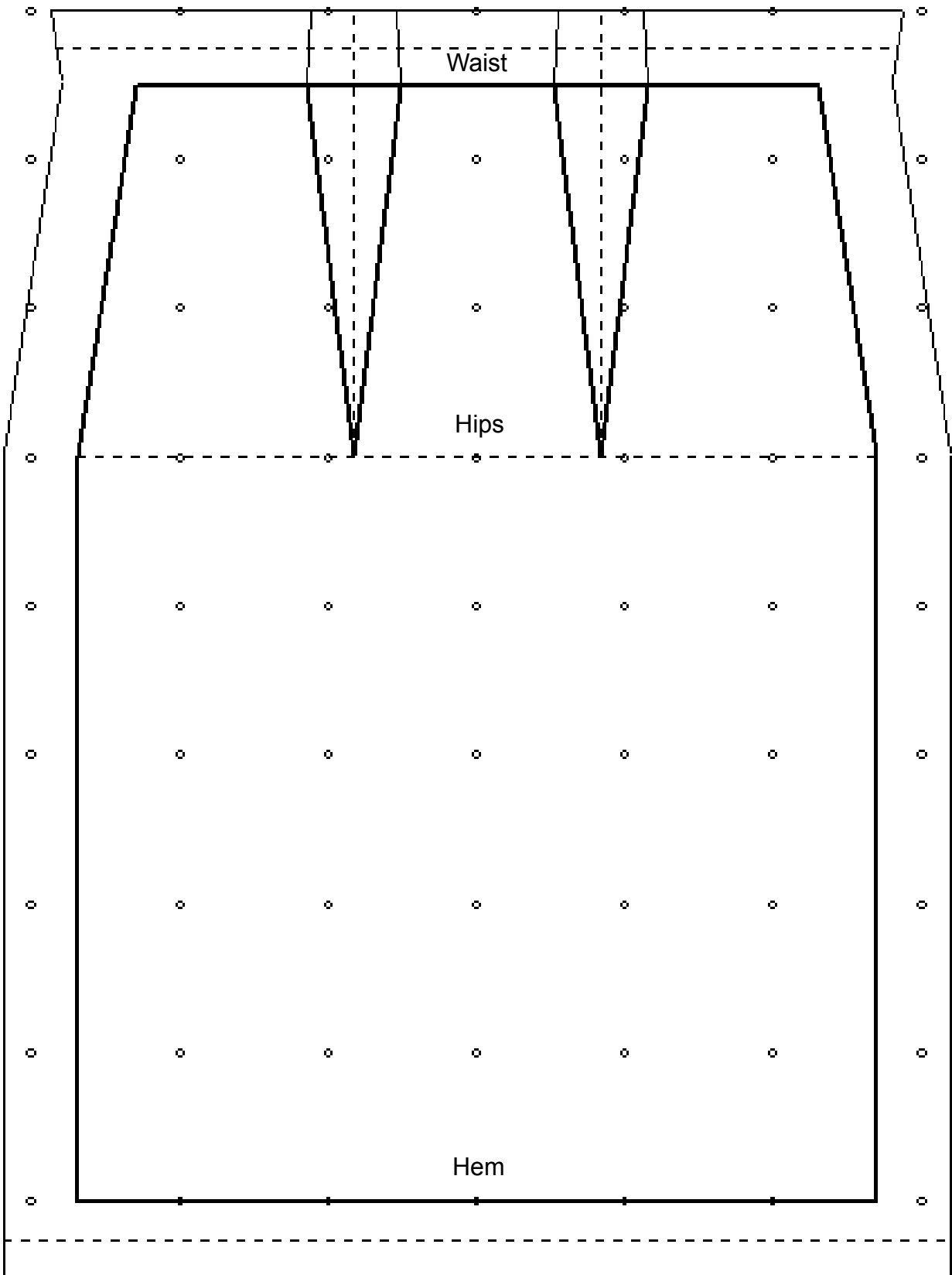
12. Cut off the excess zipper. Then, using the pattern for the front sew the rest of the skirt.

Patterns for Zipper, Back



8" by 10" (25.4cm by 20.3cm)

Pattern for Zipper, Front



8" by 10" (25.4cm by 20.3cm)

Sewing Curved Seams



Curved seams require special steps to ensure they lie flat. For the patterns for a curved seam, see page 31.



1. Cut the patterns out of fabric.
2. Where indicated on the pattern, mark notches in the seam allowance.
3. Starting from the middle, pin the two pattern pieces together, good side to good side.

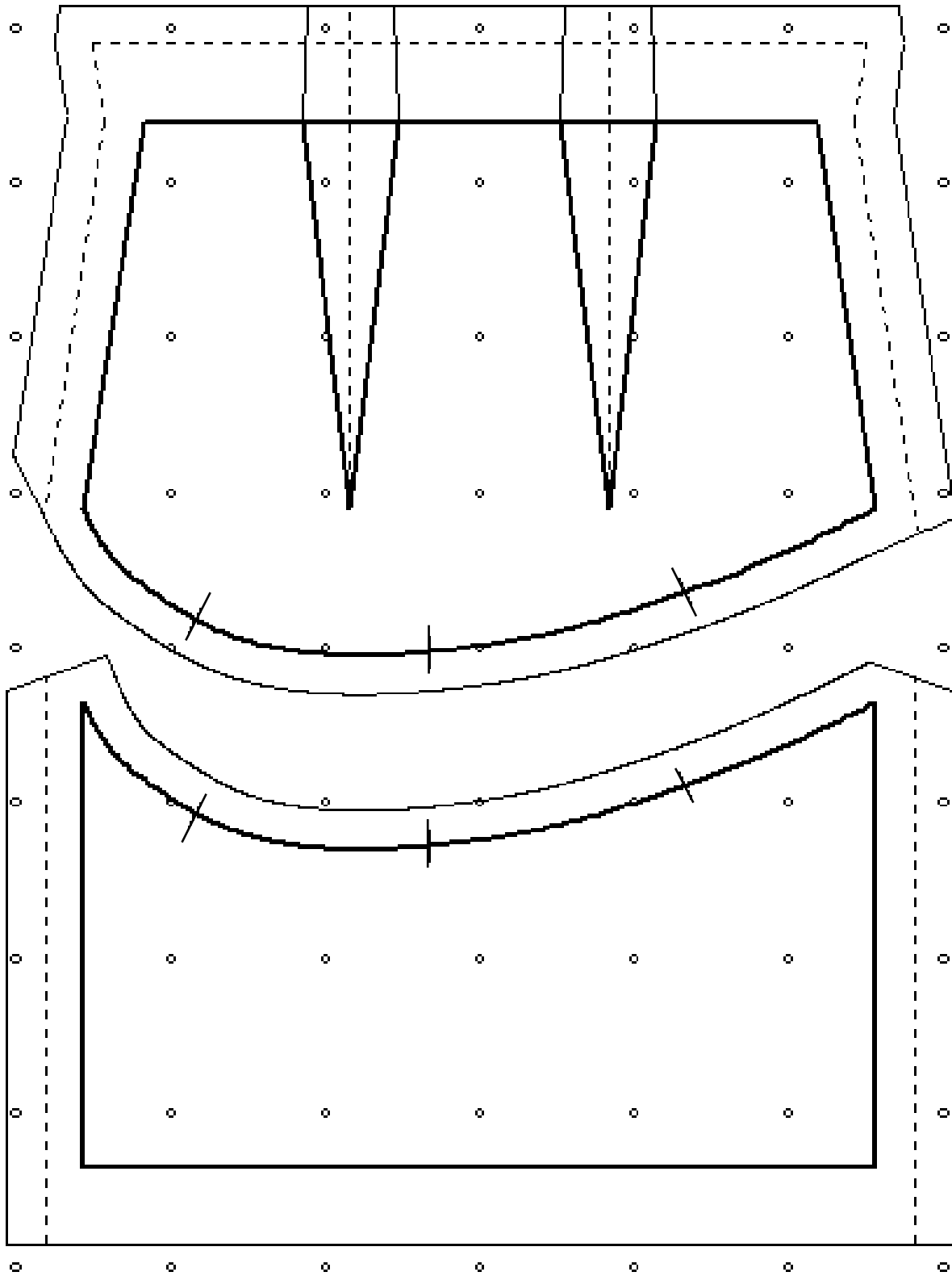


4. If possible, remove the table from the free arm of your sewing machine.
5. Sew the curved seam.
6. To keep the seam allowance flat, clip one seam allowance up to the stitching.



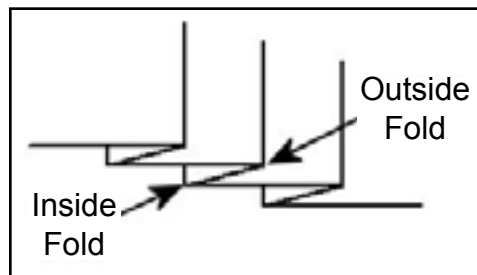
7. Then, on the other seam allowance, sew a line of 2mm wide zigzag stitches as close as possible to the initial seam.
8. On the seam allowance from Step 7, cut off the excess seam allowance.
9. This project can now be completed as described in previous videos.

Patterns for Curved Seams



8" by 10" (25.4cm by 20.3cm)

Sewing Pleats



Pleats are created by folding fabric back on itself then ironing these folds into creases. Pleats therefore have an inside fold and an outside fold. This project has a series of parallel pleats with each inside fold 1" (2.5cm) from the outside fold. The outside fold is 1/2" (1.2cm) from the inside fold. The pattern for pleating includes a template for keeping the folds evenly spaced, see page 35. This template can be copied onto heavier paper.

To prepare fabric for pleating, cut or rip fabric that is the height of the pleat pattern and at least three times as long. To finish the bottom edge, sew a narrow rolled hem with fusible thread as described for Sewing Gathers, see page 22. To help maintain the creasing of the pleats, use fusible thread.



1. Prepare the pleat fabric with a narrow rolled hem.
2. Place the template one inch in from the right edge of the pleat fabric as shown above.
3. Fold the fabric back over the template and press.

Sewing Pleats, cont'd



4. With the template still in place, fold the fabric back to the line on the pleat template and press.



5. Open up the pleat and lay the fusible thread along the crease of the inside fold.



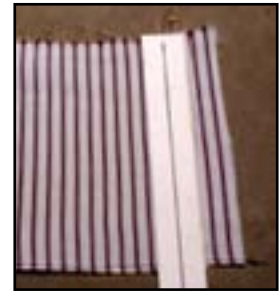
6. Fold the fabric back and lay the fusible thread along the crease for the outside fold.



7. To melt the fusible thread, press the folds for ten seconds.



8. Pin the pleat in place.



9. Position the template to the outside fold of the pleat just created.



10. Repeat Steps 3 through 9 until all the pleats have been created.



11. Sew a line of basting along the bottom of the pleated fabric.



12. Place the pattern for the pleated fabric on the pleats and draw a line outside the seam allowances.

Sewing Pleats, cont'd



13. Cut along the line drawn in Step 12.



14. Sew a second line of basting 1/2" (1.2cm) from the line.



15. Pin the pattern to the pleated fabric, then trim off any excess fabric.



16. Pin the pleated fabric to the top of the project.

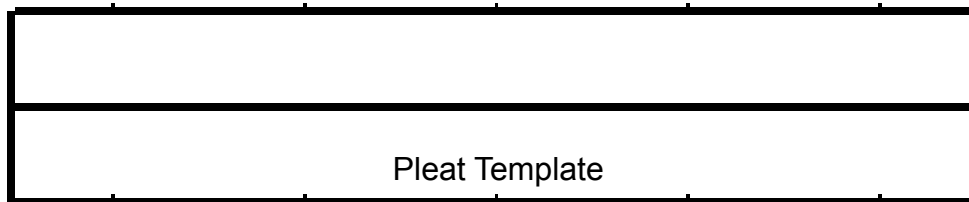
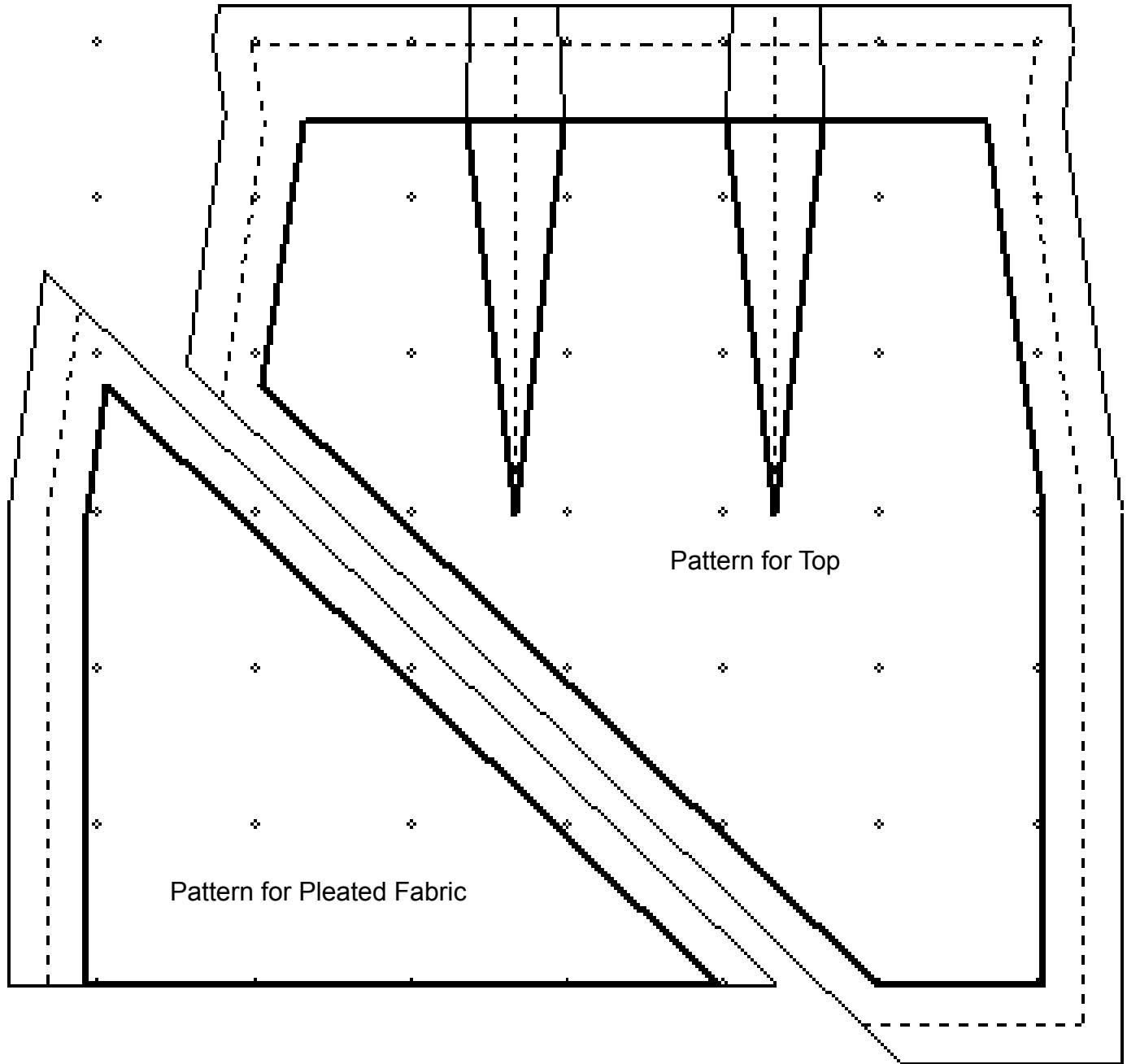


17. Good sides together, sew the pleated fabric to the top. This will be easier to sew if the pleated fabric is on top.



18. Remove the basting then complete the project as shown in the previous videos.

Patterns for Pleats



8" by 10" (25.4cm by 20.3cm)

Sewing Pockets



To add pockets for holding tools, the pattern must be extended to the full length of the bottle and sewn as a skirt, see page 38.



1. Using the pattern on page 38, cut two pieces of fabric.



2. Sew the two pieces together along one side from Hip to Hem, then press.



3. Place the items for the pockets on the fabric.



4. To create the pockets, place a strip of fabric over the items.

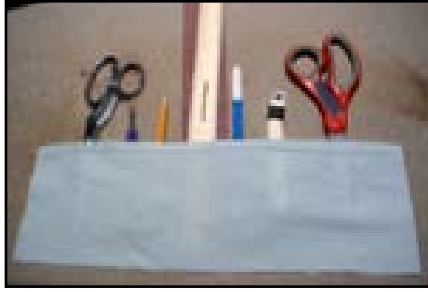


5. Cut or rip the pocket fabric to the desired depth plus a 1/2" (1.2cm) for a finished edge along the top. The length of the pocket fabric needs to be 2" (5cm) longer than the skirt fabric.



6. Set aside the items in the same order.

Sewing Pockets, cont'd



7. Sew a finished edge to the top of the pocket fabric.



8. Use a 3/4" (2cm) seam allowance to sew one end of the pocket fabric to one side of the skirt.



9. Place an item close to the seam.



10. Start from the top of the pocket and sew a line of stitches alongside this item.



11. Remove the item.



12. To sew pockets for the rest of the items, repeat Steps 9 through 11.



13. Sew a 4mm zigzag around the outer edges of the skirt.



14. Trim off any excess pocket fabric.



15. Sew the darts and the top of the seam from Step 2.



16. Baste 1/4" (.6cm) in from the top and bottom of the skirt.

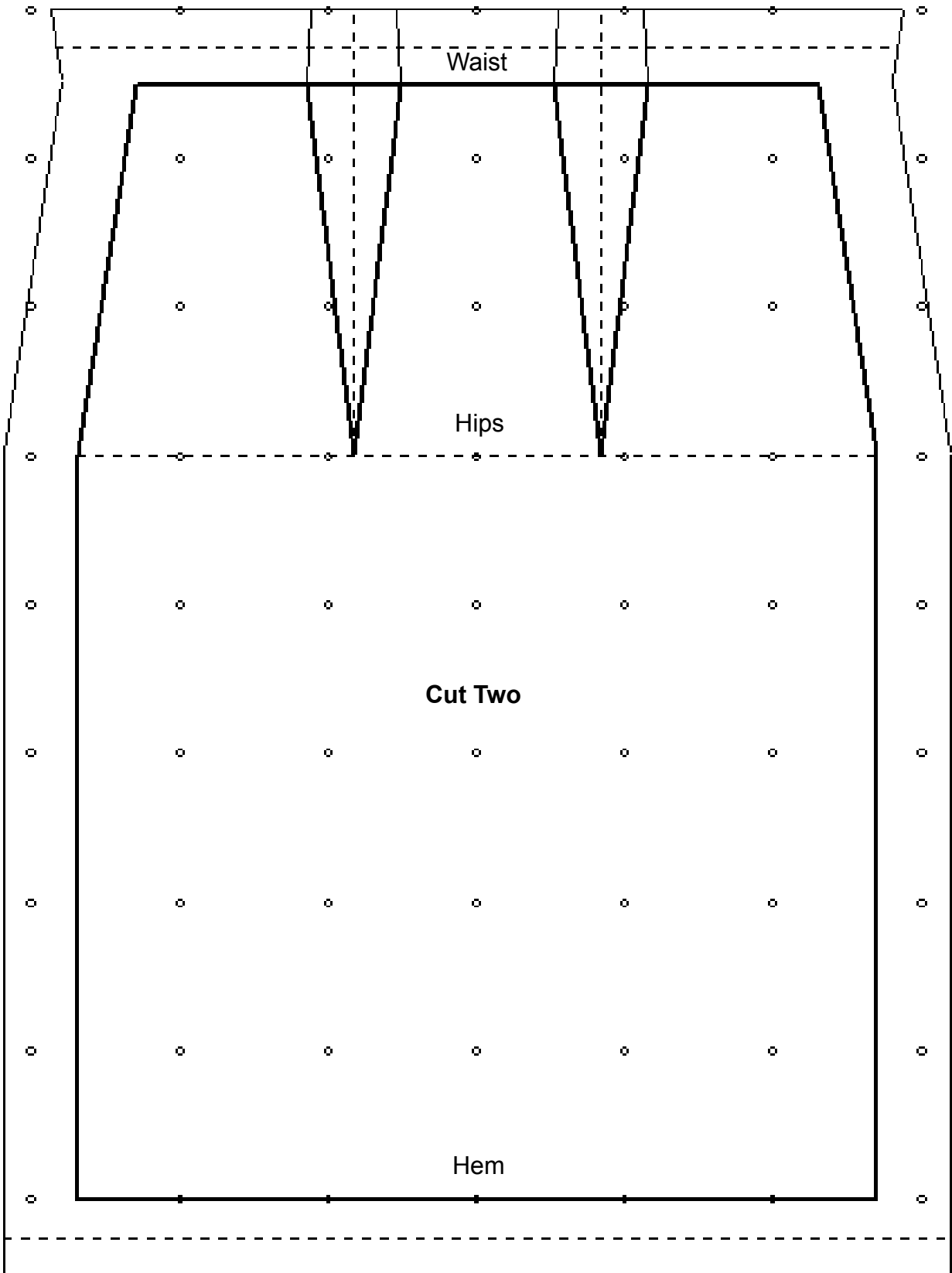


17. Fold the top and bottom along the basting and stitch them in place.



18. Sew the final seam, then turn the skirt right side out.

Pattern for Pockets



8" by 10" (25.4cm by 20.3cm)