

Basic Quiltmaking Techniques

by Diana Rehfield



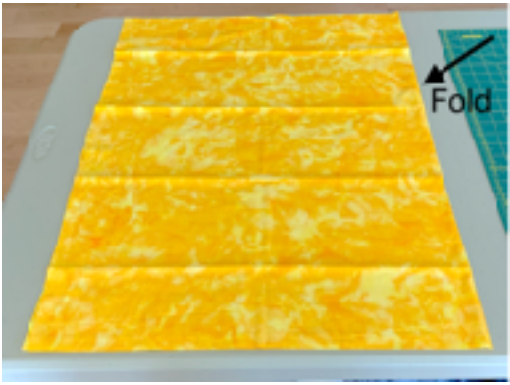

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Every quilt is different but here are some fundamental techniques you can use in every quilt you make.

Folding Your Yardage

If, like me, you often buy fabric by the yard, it's helpful to fold it differently than it comes from the shop. I fold it in a way that makes it easy to store on a shelf and easy to lay out for rotary cutting (next section).

1	Unfold and lay out your fabric on a table, with the fold on the right side.	
2	Lay a 6 inch by 24 inch ruler across the bottom of the fabric (nearest you), about 4 inches up from the bottom.	

3	<p>Fold the bottom edge of the fabric over the bottom edge of the ruler.</p>	
4	<p>Flip the ruler up, making sure the fabric stays curled around it.</p>	
5	<p>Continue flipping the ruler up until all the fabric has been rolled around the ruler.</p> <p>Note: If you end up with too small an amount of fabric left at the end to fold over again, tuck that bit under.</p>	
6	<p>For storage, I fold the length in half. Then I open it up again when I'm ready to use the fabric.</p>	

Using a Rotary Cutter

A rotary cutter is a hand-held device with a round blade that rotates as you move it. A rotary cutter makes cutting fabric faster and often more precise than hand cutting. I recommend a OLFA® Rotary Fabric Cutter 45MM and the biggest mat you can afford. Mine is an OLFA® 24" x 36" Double-Sided, Self-Healing Rotary Mat.

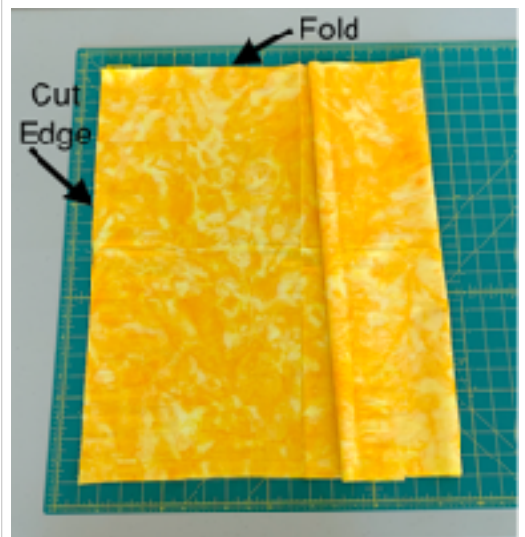
Very important notes: Rotary cutter blades are *very* sharp. Use caution with them at all times. It goes without saying but I will say it anyway: keep rotary cutters and blades away from children and pets.

- First, if your cutter does not automatically close when you put it down, always close it before you put it down. Before I started doing that, I got a few nicks but luckily no major cuts. A Fons and Porter Klutz Glove can definitely help keep your hands safe, especially while you're getting used to using a rotary cutter.
- Second, when using your rotary cutter with a quilting ruler, always take an extra beat to make sure your fingers are well out of the way of the rotary cutter before you start cutting. And keep paying attention until you are done with your cut. I have heard of some serious accidents that happened when people were not so careful.
- Third, change your rotary cutter blade when cuts don't complete as cleanly as they should, even with appropriate pressure on the cutter. Be *especially* careful when handling the blades. I put an X on used blades with a Sharpie® marker and keep them in an old blade container until it's full.

Here are the steps to use a rotary cutter:

- 1 Lay your fabric out on your cutting mat, with the fold at the top and the cut edge on the left.

Note: These instructions are for right-handed people. If you are left handed, reverse the sides in the instructions.



- 2 If your cut edge is uneven, flip the fabric over so the cut edge is on the right and follow the next steps to trim off enough to make the edge even. Otherwise, go on to the next step.

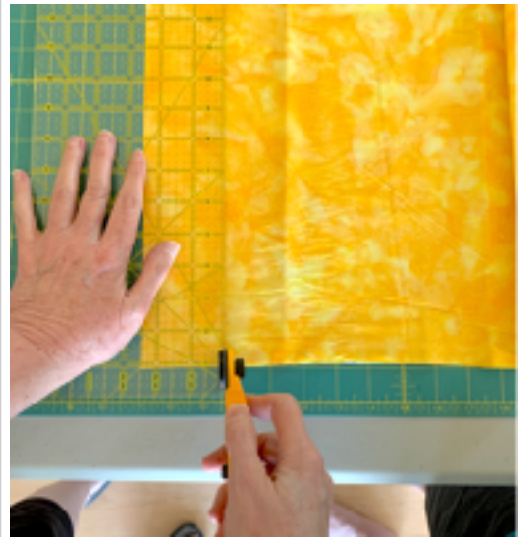


- 3 Place your left hand on the ruler, with your left pinky finger off the edge. This helps keep the ruler in place.

Make sure your other fingers are well out of the way of the right edge of the ruler and rotary cutter.

Start at the bottom edge of the fabric, holding the rotary cutter with the blade against the right edge of the ruler.

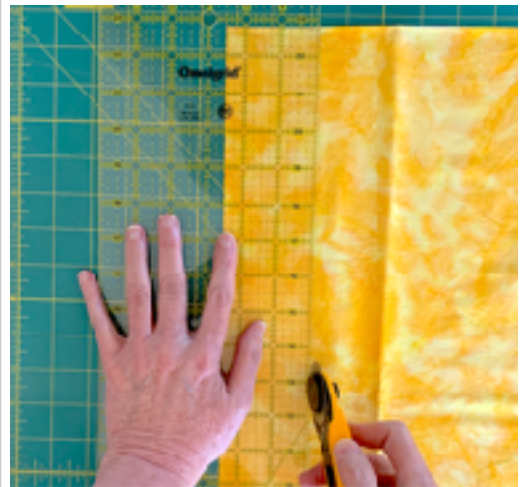
Use firm but not hard pressure to move the rotary cutter up the length of the ruler.



- 4 As you near the halfway point up the ruler, carefully move your left hand up to the top half of the ruler.

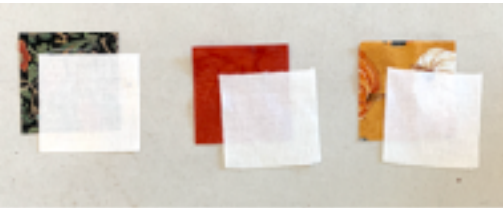
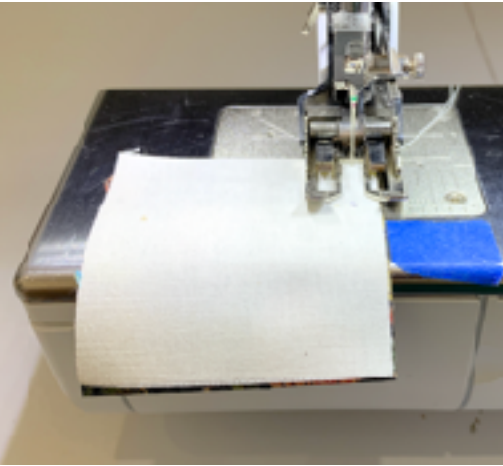

Continue applying pressure and rolling the rotary cutter up the length of the ruler until you reach just past the end of the fabric.

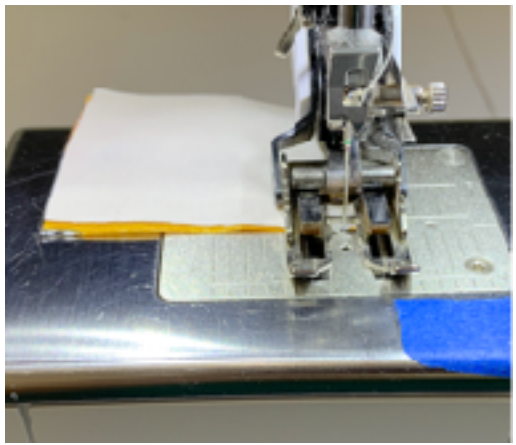


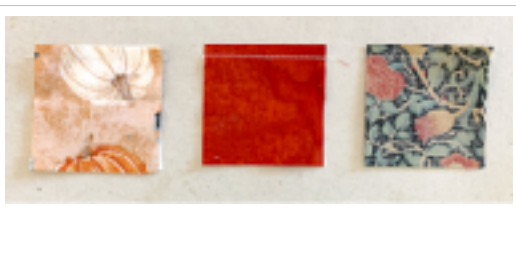
Remember to close your rotary cutter when you're done with the cut!



Chain Piecing

Chain piecing is a technique that you can use to stitch components sets (pieces sewn together) without cutting your thread between sets. This is very useful when you are making many sets of the same component. Normally I create one component set first on its own so I can make sure I cut and put it together correctly. Then I chain piece the rest of those component sets.

1	Once you have confirmed that you are putting together a component set correctly, lay out the remaining pieces in stacks, in the order in which you will sew them.	 Three stacks of fabric pieces are laid out on a light-colored surface. The first stack on the left has a small square of patterned fabric on top of a larger white square. The middle stack has a small red square on top of a larger white square. The third stack on the right has a small orange square on top of a larger white square.
2	Start sewing your first set together.	 A close-up view of a sewing machine needle and foot stitching a white fabric piece. The machine is on a dark surface, and a blue fabric strip is visible on the right side of the machine bed.
3	When you get to the end of the first seam, do not remove the set. Instead, insert the second set and start sewing that one together.	 A close-up view of a sewing machine needle and foot stitching a second white fabric piece. The first white fabric piece is still in the machine, and the second piece is being added to it. The machine is on a dark surface, and a blue fabric strip is visible on the right side of the machine bed.

4	Continue adding and sewing sets without cutting your thread until you reach the end of the last set.	
5	Remove your work from your sewing machine and cut the final thread.	
6	Cut the thread bridges between your sets.	
7	And there you go. You have three sets sewn with only one beginning and one ending thread. This technique is quicker and uses less thread than sewing each set separately.	

Sandwiching Your Layers

Sandwiching is the process of basting (pinning, spraying, or hand stitching) together your quilt top, batting, and backing so the layers will stay together while you are quilting.






1. Cut your batting to at least 6 inches wider and taller than your quilt top. For example if your quilt top is 64 by 58 inches, then your batting should be at least 70 by 64 inches.
2. Use your favorite sandwiching technique or search youtube for “pool noodle quilting” to see my favorite technique for sandwiching the quilt top, batting, and backing. I use 8 foot lengths of 1 by 2 inch lumber in place of pool noodles. I do my sandwiching on a raised 6 foot table. Really saves my back!

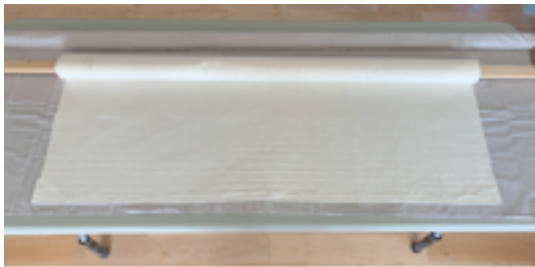


Here are the steps I use:

- 1 Lay your quilt top on a table, face up, with the bottom edge by the edge of the table closest to you.

Lay the first of your three pool noodles or wood lengths on the end of the table nearest you.



2	<p>Start to roll the edge of the fabric nearest you over the noodle, making sure the fabric stays flat all the way across.</p>	
3	<p>Continue rolling away from you until you have rolled up the entire quilt top. Set the roll aside.</p>	
4	<p>Do steps 1 through 3 for your batting. Set the roll aside.</p>	
5	<p>Do steps 1 through 3 for your backing. If there is a right side to your backing, make sure you lay it down right side towards the table (wrong side up).</p>	
6	<p>Turn the backing roll around so it's rolling away you. Roll out the backing until the roll is near the length of the table farthest from you.</p>	

<p>7 Lay the batting down on the backing, centering it left to right and leaving a bit of backing exposed at the length nearest to you.</p> <p>Roll out the batting until the roll is bumping up against the backing roll at the far edge of the table.</p>	
<p>8 Lay your quilt top down on the batting, centering it left to right and leaving about 2 inches of batting exposed at the length nearest to you.</p>	
<p>9 Leaning against the side of the table closest to you to hold that end of the layers in place, gently pull the rolls away from you a bit to make sure all the layers are flat.</p> <p>Run your hands from the center out to make sure the layers are as flat as possible.</p>	

10 Use bent safety pins about 7 inches apart to “baste” your layers together.

Use a Kwik Klip® tool if you tend to stab yourself in the finger like I do.



11 As you finish pinning one section, pull the pinned part towards you so the last pins are near the edge of the table closest to you.

Unroll the backing so the roll is near the opposite end of the table. Gently tug on the backing roll to make sure the backing is flat. Repeat for the batting and then for the quilt top.



12 Repeat steps 9 through 11 until you reach the end of the quilt top.



13 Trim the edges of the quilt sandwich to leave about 3 inches around the quilt top on all sides.



14 Look at the back side of the quilt sandwich to make sure there are not any puckered or folded areas in the backing. If you find any problem areas, turn the quilt back over and re-pin that area until the problem areas are flat on both sides.



Quilting Your Sandwich




The batting I use (Warm and Natural Needled Cotton Batting®) recommends up to 10 inches of open area in quilting. I usually do stitch-in-the-ditch quilting, about 8 inches between lines. I do all my vertical quilting first, rolling the quilt along the vertical axis to expose sections to quilt. Then I do my horizontal quilting. Pay attention to what your batting package calls for in terms of spacing and then do what pleases you!

I leave my walking foot on my sewing machine all the time. If you don't normally use a walking foot, I highly recommend using one for quilting your sandwich. It really helps keep the layers from shifting.

The only time I backstitch while quilting my sandwich is when the stitching does not go to the edge of the quilt top.

I use a slightly longer stitch length to quilt than I do to piece. On my machine, I set the length to 3.0 which is 3 mm. If you want to use a longer stitch length, set it now.

If you are quilting lines that are not in seams, you can use a marking pencil or tailor's chalk to mark the lines to quilt. Just make sure whatever marking method you use really is removable before you mark your quilt!

<p>1 Roll your quilt along the long direction to the middle. Repeat on the other side so the rolls meet in the middle.</p>	
<p>2 Open the rolls so there is about 2 to 3 inches on each side of the area you want to stitch.</p>	
<p>3 Stitch from just above the top edge of the quilt top until just below bottom edge of the quilt top.</p> <p>You can see my blue tailor's chalk where I marked a no-seam area. The chalk comes out in the wash.</p>	

- 4 Repeat steps 2 and 3 until you have all your vertical quilting lines stitched.



- 5 Unroll your quilt. Repeat steps 1 through 4 in the horizontal direction.

Remove the safety pins from your quilt.

Turn your quilt over and check the backing to make sure there are no puckers or folds, especially around the edges. If there are, fix them if you can. I rarely have issues but it's better to find them before you baste the edges.



- 6 Baste the edges of the sandwich.

I use a large (4.0 mm on my machine) stitch length and sew about 1/8 inch from the edge of the quilt top, all the way around.



- 7 Use fabric shears to trim right up to the edge of the quilted top.

Yes, you could square up the quilt sandwich at this point, but I don't. And yes, you could use a rotary cutter instead of fabric shears but I have many fewer problems using shears.



Binding Your Quilt

This is one of my favorite parts of making a quilt because I'm almost done!

You rarely need to backstitch while making a quilt but I always backstitch at the beginning and end of every seam while attaching the binding. It gets a lot of handling in the life of the quilt and you don't want anything to come apart.

Go back to your piecing stitch length if it's still set for basting. That is 2.5 mm on my sewing machine.

- 1 I use the following formula to determine how many strips of binding I need (assumes fabric is 44 inches wide):

$$((\text{width} + \text{height}) * 2) / 40$$

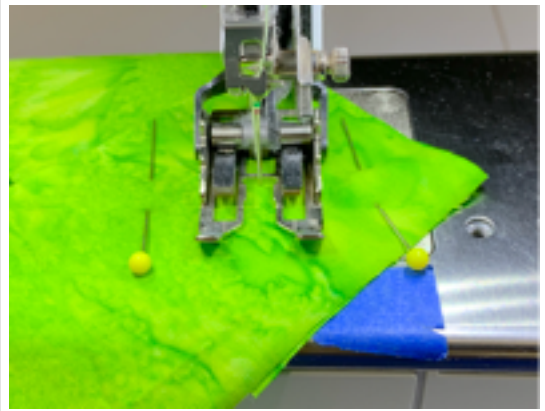
For example:

$$((54-1/2 + 44-1/4) * 2) / 40 = 4.9$$

Cut 5 pieces, each 2-1/2 inches wide by width of fabric from your border color. Trim off selvage edges if not using batik fabric.



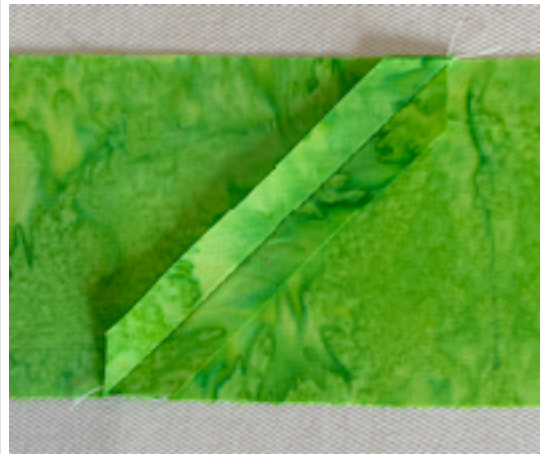
2 Sew two binding strips together on the diagonal to distribute the seam bulk more evenly.



3 Trim the diagonal seam.



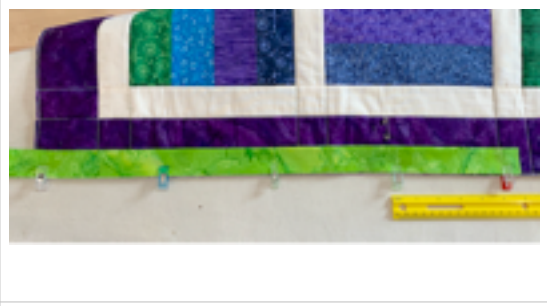



4 Press the seam open.



5 Repeat steps 2 through 4 to sew together all the binding pieces.



6	Iron the binding in half along the long edge.	
7	On the front side of the quilt, find the center of the bottom length of the quilt and put safety pins to mark each end of 12 inches.	
8	Still on the front side of the quilt, place the end of the binding in the center between the safety pins and clip in place.	
9	Place clips every 5 inches or so until the quilt edge.	

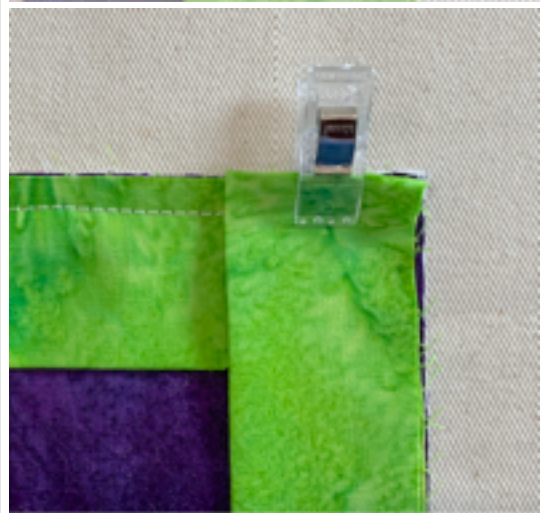
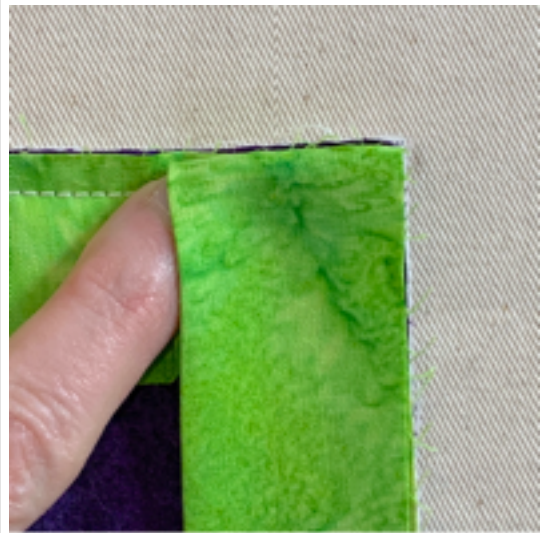
10 Only for the **first** edge:
Sew a 1/4 inch seam from the second safety pin **to 1/4 inch from the edge** for the first side.
For **subsequent** edges, start sewing at the **top** and sew to 1/4 inch from the edge of the side.

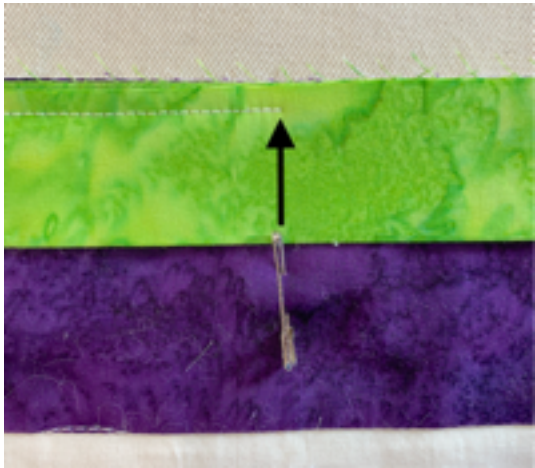
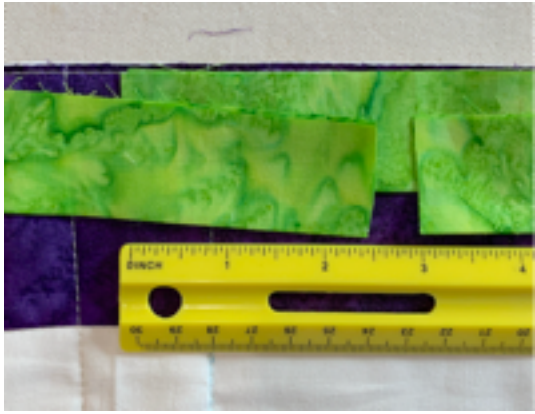



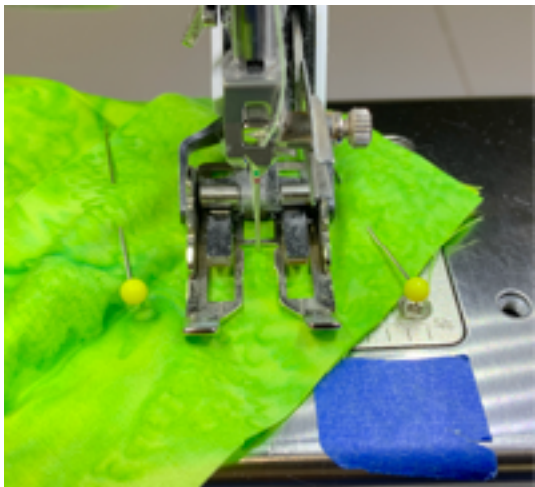



11 Sew on a diagonal to the corner of the quilt edge.



12 Fold the binding corner and clip in place.



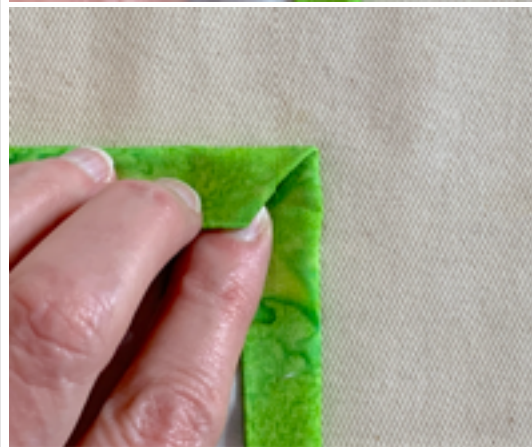
<p>13 Repeat steps 9 through 12 until you get all the way around and back to the first safety pin.</p>	
<p>14 Trim the left side 2-1/2 inches (or whatever width your binding is if it's not 2-1/2 inches) longer than the end of the right side of the binding.</p>	
<p>15 Bring the binding ends of the opening together to give you more slack. Pin the seam. This can feel challenging the first few times you do it but it will get easier with time.</p>	

<p>16 Sew the strip ends together on the diagonal.</p>	
<p>17 Remove your pins and close the binding to make sure you got the seam in the right place and direction.</p>	
<p>18 Trim the diagonal seam and finger press it open.</p>	
<p>19 Pin and sew down the remaining binding seam (between the ending and beginning of your previous sewing).</p>	

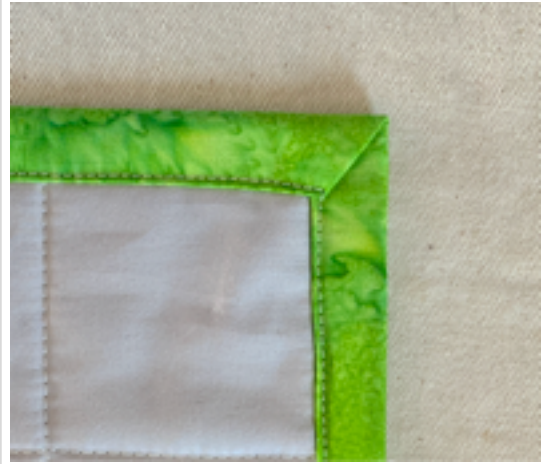
20 Remove the marker safety pins and press the binding away from the quilt top.



21 Flip the binding to the back of the quilt top. Using sewing clips, work all the way around the quilt top, making sure the binding is snug around the quilt top. When you reach a corner, fold the binding as shown and hold in place with a clip.



22 On the back side of the quilt, stitch down the binding all the way around, very close to the inner edge of the binding, raising your needle and turning on the corners.



Washing Your Quilt

The final step is washing the quilt. This gets rid of the chemicals in the fabric manufacturing and also gets rid of the majority of any dye bleeding that will happen, if any. I put four Shout Color Catcher® sheets in the washer with my quilt and I wash and dry the quilt on warm.

Note: Many quilters like to add a label to their quilt. I did it a few times when I started but, to be honest, I'm just too lazy so I don't do it anymore. A label can add meaning to the quilt and, assuming your quilt lasts for many years, provide good information to future owners of the quilt.

Reference

Yardage Measurements

Fraction of Yard	Inches	Decimal
1/8	4.5	0.125
1/4	9	0.25
1/3	12	0.33
3/8	13.5	0.375
1/2	18	0.5
5/8	22.5	0.625
2/3	24	0.66
3/4	27	0.75
7/8	31.5	0.875
1	36	1

Quilt Sizes — Bed

Bed Type	Mattress Size (inches)	12 inch drop (inches)
Twin	39 x 76	63 x 87
Twin XL	39 x 80	63 x 92
Full	54 x 75	78 x 87
Queen	60 x 80	84 x 92
King	78 x 80	102 x 92
California King	72 x 84	96 x 96

Quilt Sizes — Other

Item	Size (inches)
Lap quilt	45 x 60
Baby quilt	30 x 40
Crib quilt	36 x 52
Throw quilt	50 x 65
Wheelchair quilt	36 x 44

Note: These sizes are a guide but, of course, you can make quilts any size you like.