



Steps for Calculating Yardage Requirements

1. Take the fabric web width in inches, subtract 1 (to account for selvedge edges* which usually measure 1/2" on either side), multiply by 0.94 for Stitch Simple Ready to Sew fabric (to account for errors) or 0.91 for unprepared fabric (to account for a typical cotton shrink rate of 3% in addition to errors). Round your answer *down* to the nearest whole number. You can often get more than this formula would suggest, but better safe than sorry.
2. Divide the result from Step 1 by the piece width** to get the number of pieces you can get from a strip of fabric (strips run perpendicular to the selvedge edge* of the fabric). You will need to round the result *down* to the nearest whole number (you can't use a portion of a piece).
3. Now take the total number of pieces you will need and divide that by the result from Step 2 to get the total number of strips you need. You will need round this result *up* to the nearest whole number (while you can use a portion of a strip, you can't usually buy one).
4. Next we need to convert the number of strips into inches by multiplying the result from Step 3 by the piece length**.
5. The last step is to convert our answer from Part 4 into yards by dividing it by 36.

***The selvedge edge is the edge of fabric that's woven so it won't fray or unravel.** It often contains information about the fabric designer and/or manufacturer in lieu of the fabric print.

****The piece width is perpendicular to the selvedge edge, while the piece length is parallel.** This distinction is important when using one-way and two-way repeat prints as it effects the direction of the fabric print as it flows across the cut pieces.

For squares, the piece width and length are the same (e.g. a 6" square has a piece width of 6" and a piece length of 6").

For half rectangle triangles, use the *full rectangle* piece width and piece length and enter the number of *full rectangles* needed (e.g. 24 half rectangle triangles from a full rectangle measuring 3" x 7" (width x length) would use piece width=3, piece length=7, number pieces needed=12. PLEASE NOTE AN IMPORTANT EXCEPTION: If using one-way repeat fabric (i.e. it has a specific up/down or "north/south" direction) the number of pieces needed should be the number of *half rectangles*. To continue with the example, 24 one-way repeat half rectangle triangles from a full rectangle measuring 3" x 7" (width x length) would use piece width=3, piece length=7, number pieces needed=24. This is necessary to ensure the pattern flows consistently across the cut pieces.

For all other non-rectangular shapes, determine the size rectangle that would cover the shape you intend to cut and then use its dimensions when entering the required information into the calculator (e.g. a circle with a diameter of 9" would use piece width=9 and piece length=9).

Keep in mind, the result of Steps 4 and 5 is an exact number

It pays to add a cushion of an extra 5 inches or so to the fabric length in case of a mishap (Step 1 only accounts for errors and shrinkage in the *width*). When buying unprepared fabric, also note that you generally need to purchase 1/8-1/4 yard increments. At Stitch Simple, we happily let customers order Ready to Sew fabric by the inch without increment requirements (minimum order=9 inches aka "skinny" quarter yard).

Let's do an example

We want to use 110" wide fabric to cut 30 circles with a 9" diameter and 45" wide fabric to cut 50 half rectangle triangles with straight (i.e. not diagonal) side lengths of 3" and 7". All of the fabric we want to use is from Stitch Simple, so it's Ready to Sew.

Let's start with the triangles. The fabric we like has stripes (a two-way repeat print) that run parallel to the selvedge edges. We want the stripes to run parallel to our 7" side in the cut triangles, so we'll need to use a piece length of 7" (if we used a piece length of 3", the stripes would run parallel to the triangle's 3" side).

Using the steps outlined above, Step 1: $(45-1) \times 0.94 = 41.36$ or 41. Step 2: $41 \div 3 = 13.67$ or 13. Step 3: $25 \div 13 = 1.92$ or 2 (Note, we used 25 as the number of pieces needed because we are not using a one-way repeat print. If we were using such a print, we'd need to take $50 \div 13$ because we could only get one half rectangle triangle out of a full rectangle. The fabric print would be upside down on the other half rectangle). Step 4: $2 \times 7 = 14$. Step 5: $14 \div 36 = 0.39$ yards.

Calculating the circles is much easier. Just like squares, the piece width is equal to the piece length for circles and we don't need to worry about the direction of our fabric print (even if we use a one-way repeat) because we can simply turn the cut piece to control the flow of the fabric print as desired. Using the steps outlined above, Step 1: $(110-1) \times 0.94 = 102.46$ or 102. Step 2: $102 \div 9 = 11.33$ or 11. Step 3: $30 \div 11 = 2.73$ or 3. Step 4: $3 \times 9 = 27$. Step 5: $27 \div 36 = 0.75$ yards.