

### 3- HALF SQUARE TRIANGLE FORMULAS YOU NEED TO KNOW

Courtesy of Quilting Blog by Sheri Cifaldi-Morrill

Many quilters want to know how to figure how large their initial fabric piece needs to be in order to achieve the size of the half-square triangle they want to make.

HERE ARE THREE FORMULAS I USE TO CALCULATE FABRIC REQUIREMENTS FOR A SPECIFIC SIZE HALF-SQUARE TRIANGLE.

#### 1. MAKING HSTS TWO AT A TIME (THE "TRADITIONAL" METHOD)

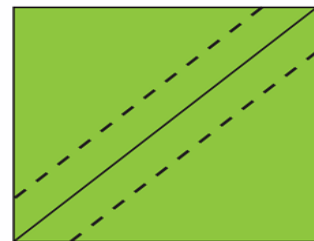
First, determine the size you want your unfinished HST block to be (the size before you sew your blocks together, taking into account your typical  $\frac{1}{4}$ " seam allowance). Add 1" to that number. This is the measurement you want to cut the squares to make your two half-square triangles.

UNFINISHED HST BLOCK + 1" = SQUARE SIZES TO MAKE HSTS USING THE "TRADITIONAL" TWO-UP METHOD



4" blocks unfinished  
3½" blocks (finished)

=



start with 5" squares  
*(makes two generous half square triangles—  
you'll have about ½" extra fabric when  
trimming and squaring up blocks*

## Making HSTs two at a time

unfinished HST block size	finished HST block size	square sizes needed to make HSTs*
2"	1½"	3"
2½"	2"	3½"
3"	2½"	4"
3½"	3"	4½"
4"	4½"	5"
4½"	4"	5½"
5"	5½"	6"
5½"	5"	6½"

*\*When making half-square triangles, I always like to square up my blocks before I use them. I find that this helps make block alignments precise and enables me to have better results when piecing my half-square triangles together. I also make my HSTs with more fabric than most other quilters do. While there is a bit more waste, adding this extra amount makes for a less frustrating trimming experience, especially if my ruler slips a bit and I need to make a second cut.*

*I recommend making a couple of test HSTs before cutting all of your fabric. You may find that you are comfortable starting with smaller squares of fabric.*

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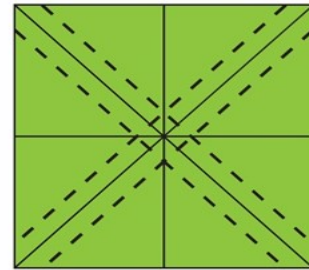
#### 2. MAKING HSTS EIGHT AT A TIME (ALSO CALLED THE "MAGIC 8" METHOD)

Again, determine the size you want your unfinished HST block to be (the size before you sew your blocks together, taking into account the ¼" seam allowance). Add 1". Then, multiply that number by 2. This is the measurement you want to cut the squares to make your half-square triangles.

(UNFINISHED HST BLOCK + 1") X 2 = SQUARE SIZES TO MAKE HSTS USING THE "MAGIC 8" METHOD



4" blocks unfinished  
3½" blocks (finished)



start with 10" squares  
*(makes eight generous half square triangles—  
you'll have about ½" extra fabric when  
trimming and squaring up blocks*

## Making HSTs eight at a time

unfinished HST block size	finished HST block size	square sizes needed to make HSTs*
2"	1½"	6"
2½"	2"	7"
3"	2½"	8"
3½"	3"	9"
4"	3½"	10"
4½"	4"	11"
5"	4½"	12"
5½"	5"	13"

*\*When making half-square triangles, I always like to square up my blocks before I use them. I find that this helps make block alignments precise and enables me to have better results when piecing my half-square triangles together. I also make my HSTs with more fabric than most other quilters do. While there is a bit more waste, adding this extra amount makes for a less frustrating trimming experience, especially if my ruler slips a bit and I need to make a second cut.*

*I recommend making a couple of test HSTs before cutting all of your fabric. You may find that you are comfortable starting with smaller squares of fabric.*

### 3- HALF SQUARE TRIANGLE FORMULAS YOU NEED TO KNOW

#### 3. MAKING HSTS WITH STRIPS OF FABRIC

Determine the size you want your unfinished HST block to be (the size before you sew your blocks together, taking in account the 1/4" seam allowance). This is the minimum measurement you want to cut the widths of the strips to make your half-square triangles.

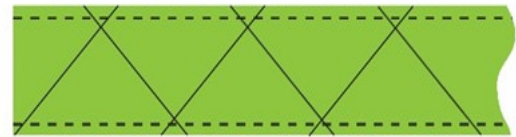
UNFINISHED HST BLOCK = STRIP WIDTH TO MAKE HSTS USING THE STRIP METHOD\*

\*for unfinished HSTs that are 3" or smaller, add an extra 1/2" to the strip width as indicated in the chart below.



4" blocks unfinished  
3 1/2" blocks (finished)  
quantities depend on length of strip

=



start with 4" strips  
(makes generous half square triangles—you'll have about 1/2" extra fabric when trimming and squaring up blocks)

## Making HSTs with strips of fabric

unfinished HST block size	finished HST block size	strip width needed to make HSTs*
2"	1 1/2"	2" + 1/2" = 2 1/2"
2 1/2"	2"	2 1/2" + 1/2" = 3"
3"	2 1/2"	3" + 1/2" = 3 1/2"
3 1/2"	3"	3 1/2"
4"	3 1/2"	4"
4 1/2"	4"	4 1/2"
5"	4 1/2"	5"
5 1/2"	5"	4 1/2"

*\*When making half-square triangles, I always like to square up my blocks before I use them. I find that this helps make block alignments precise and enables me to have better results when piecing my half-square triangles together. I also make my HSTs with more fabric than most other quilters do. While there is a bit more waste, adding this extra amount makes for a less frustrating trimming experience, especially if my ruler slips a bit and I need to make a second cut.*

*I recommend making a couple of test HSTs before cutting all of your fabric. You may find that you are comfortable starting with strips that are more narrow.*

### 3- HALF SQUARE TRIANGLE FORMULAS YOU NEED TO KNOW

#### **DON'T FORGET TO SQUARE UP YOUR BLOCKS BEFORE USING THEM!**

For a few tips for achieving better, more precise half-square triangles.

##### TIP #1: CUT LARGER PIECES

There are many different ways to make half-square triangles, but Kate's favorite method is cutting oversized pieces and trimming them down. For example, if you need to make an unfinished HST that's 10.5", cut the squares first to 10-5/8". This way, you can trim down the excess to get perfect, accurate points exactly where you need them.

##### TIP #2: LINE IT UP JUST RIGHT

Instead of just placing your ruler on your diagonal line and cutting away, take this extra step to place it perfectly: Set your ruler right at the point closer to you. Position your rotary cutter in place. Then, move the top of the ruler to align it with the top of the corner. You'll find that your cut is perfectly precise!

##### TIP #3: USE A SQUARE RULER TO PERFECTLY SQUARE UP BLOCKS

Squaring up half-square triangles is easier than ever when you use a square ruler. Position the diagonal line of your ruler along the seam line of your block. Check that the corners are perfectly aligned. Trim the right side and the top first, then rotate the block and trim the other sides.

But what if your square ruler isn't the same size as your HST block? Try [this technique](#).

##### TIP #4: PRESS YOUR SEAMS OPEN

Some quilters think pressing seams open is always a bad idea, but it can be useful! If you press your seams open, your half-square triangle blocks will lay much flatter and the intersections will line up more accurately.

You can get more of Kate's quick tips by watching the video tutorials that come with the Flower Basket kit. Grab the kit and sew alongside our community of makers!

#### **DESIGNING WITH HALF-SQUARE TRIANGLES**

Once you master these formulas, you can design all kinds of quilted projects, from traditional designs to more modern projects.

