Half-Square Triangles (HSTs) are used in thousands of quilt blocks. They are made up of two 90-degree triangles. Each triangle occupies half of the square’s space, and you can make them any size. The angled line created by the seam where two different fabrics are sewn together provides a design feature that can be used to lead the eye across the surface of the quilt.

Quilters have developed many ways to make quick-pieced HST units. The long edge of the triangle is on the bias of the fabric, so care must be taken to not stretch that edge. Rather than cut out individual triangles, you can avoid dealing with a cut bias edge if you sew two squares of fabric together diagonally and then cut them apart.

Demonstrate the bias cut edge versus sewing two pieces together diagonally to keep fabric from stretching.

Simple Half-Square Triangle Method:
Draw a diagonal line on the backside of a light-colored square. If you don’t have a quarter-inch foot for your sewing machine, you can draw the sewing lines ¼” on each side of the drawn diagonal line. The Quilter’s Quick Quarter Ruler makes drawing the cutting and stitching lines very easy.

Layer the light square with a contrasting square, right sides together. Sew ¼” on each side of the drawn line. Cut on the drawn line. Set the seam with the iron and press the seam allowance toward the darker fabric; sometimes the seam allowance may be pressed open too. This makes two HST units.

What size do you cut the squares?
**Traditional Formula:** Add ⅛” to the finished size of the square. Cut a 3⅞” square to make a 3” finished (3½” unfinished) HST.
**Formula for Trimmed HSTs:** For more precision of the HST units, you can add 1" to the finished size and square up the HST units after they are sewn to assure all of the HST are the same size; we will cut a 4" square to make 3" finished (3½" unfinished) HST units after trimming.

![Diagram of a 4" square with HST lines](image)

**Trimming the HST:** Using a small ruler, lay the 45-degree angle of the ruler on the seam line of the HST. Slide the ruler so you can check the measurement of your square, keeping the 45-degree line on the seam line. Trim two edges, and then repeat the process of laying the 45-degree angle on the seam line to trim the other two edges.

**Something to remember:** Each set of two squares will make two Half-Square Triangle units! If a block needs 8 HSTs, 8 divided by 2 = 4 squares of 2 colors are needed to make 8 HSTs.

**Multiple Half-Square Triangle Method:**
To make eight HSTs, cut one 8" light and one 8" dark square. On the backside of the light square, draw a diagonal line from one corner to the opposite corner; repeat by drawing another diagonal line between the other two corners. Draw a center line horizontally and another line centered vertically – these are cutting lines.

![Diagram of a 8" square with cutting lines](image)

Sew on both sides of the diagonal lines. Cut on the drawn horizontal and vertical lines. Then cut on the drawn lines between the stitched lines. Set the seams and press seams toward the darker fabric. Trim the HSTs to 3½".

Demonstration of pressing seams toward the darker fabric.
Sewing Half-Square Triangles (HSTs):
We need 8 HSTs using one 8" Red and Background square for each block. We can use the Multiple Half-Square Triangle Method for making the HSTs to make 8 HST units. Repeat by pairing the other three 8" Red and Background squares. 8 per block x 4 blocks = 32 HSTs in Red and Background.

Sew 3 HSTs in Light Green and Gold for each block:
3 per block x 4 blocks = 12 HSTs are needed in Light Green and Gold. Layer two 8" squares of Light Green with two 8" squares of Gold, right sides together. Follow the Multiple Half-Square Method for drawing the lines and stitching ¼" on each side of the diagonal lines. You will have 4 units left over that can be used in another project because one corner of each block is a different color where they come together in the center of the quilt. Trim the HSTs to 3½".

For the four HSTs in the corners that meet in the center of the quilt, we need two HSTs that are Dark Green and Gold and two HSTs that are Red and Gold. Use the Simple Half-Square Triangle Method for these HSTs.

Layer a 4" square of Dark Green with a 4" square of Gold, right sides together. Two blocks will have one corner with the Dark Green/Gold HSTs and two blocks will have one corner with the Red/Gold HSTs. Trim the HSTs to 3½".
Layer a 4" square of Red with a 4" square of Gold, right sides together. Use the Simple Half-Square Triangle Method for these HSTs. Two blocks will have one corner with the Red/Gold HSTs. Trim the HSTs to 3½".

Viola! That is how easy it is to make Half-Square Triangles for this project.

**Next Lesson: Quarter-Square Triangles**