

What size do I need to cut for Square and Triangles units?

There is a 'formula' for virtually every shape we need to cut for patchwork. Hopefully the following will help you to work out how to rotary cut your squares, rectangles and triangles (various) and to set your blocks on point.

Finished size – this is the size of the unit/piece once it is stitched into the block/quilt.

Rounding up to the nearest $\frac{1}{8}$ inch. If you have had to use a calculator then you need decimals not fractions.

$$\begin{array}{llll} \frac{1}{8} = 0.125 & \frac{1}{4} (\frac{2}{8}) = 0.25 & \frac{3}{8} = 0.375 & \frac{1}{2} (\frac{4}{8}) = 0.5 \\ \frac{5}{8} = 0.625 & \frac{3}{4} (\frac{6}{8}) = 0.75 & \frac{7}{8} = 0.875 & \end{array}$$

There are two methods of making these units – one at a time i.e. cutting each individual square and triangle; or two at a time which means cutting a square and some rectangles for the triangles. The squares are cut the same size whichever method you use – as for all squares, just add $\frac{1}{2}$ inch to half the finished size of the unit as your seam allowance

Cutting sizes for the one at a time method.

The large triangle is a half-square triangle (HST) and is cut from a square that is $\frac{7}{8}$ inch larger than the finished size of the unit. The smaller triangles are also HSTs and are cut from a square measuring half the size of the finished unit plus $\frac{7}{8}$ inch. Each resulting square is then cut in half diagonally to give two HST units.

Finished size of unit	Size of corner square	Size of square for larger triangle	size of square for small triangles
2	$1\frac{1}{2}$	$2\frac{7}{8}$	$1\frac{7}{8}$
$2\frac{1}{2}$	$1\frac{3}{4}$	$3\frac{3}{8}$	$2\frac{1}{8}$
3	2	$3\frac{7}{8}$	$2\frac{3}{8}$
$3\frac{1}{2}$	$2\frac{1}{4}$	$4\frac{3}{8}$	$2\frac{5}{8}$
4	$2\frac{1}{2}$	$4\frac{7}{8}$	$2\frac{7}{8}$
$4\frac{1}{2}$	$2\frac{3}{4}$	$5\frac{3}{8}$	$3\frac{1}{8}$
5	3	$5\frac{7}{8}$	$3\frac{3}{8}$
$5\frac{1}{2}$	$3\frac{1}{4}$	$6\frac{3}{8}$	$3\frac{5}{8}$
6	$3\frac{1}{2}$	$6\frac{7}{8}$	$3\frac{7}{8}$
$6\frac{1}{2}$	$3\frac{3}{4}$	$7\frac{3}{8}$	$4\frac{1}{8}$
7	4	$7\frac{7}{8}$	$4\frac{3}{8}$
$7\frac{1}{2}$	$4\frac{1}{4}$	$8\frac{3}{8}$	$4\frac{5}{8}$
8	$4\frac{1}{2}$	$8\frac{7}{8}$	$4\frac{7}{8}$
$8\frac{1}{2}$	$4\frac{3}{4}$	$9\frac{3}{8}$	$5\frac{1}{8}$
9	5	$9\frac{7}{8}$	$5\frac{3}{8}$
$9\frac{1}{2}$	$5\frac{1}{4}$	$10\frac{3}{8}$	$5\frac{5}{8}$

10	$5\frac{1}{2}$	$10\frac{7}{8}$	$5\frac{7}{8}$
$10\frac{1}{2}$	$5\frac{3}{4}$	$11\frac{3}{8}$	$6\frac{3}{8}$
11	6	$11\frac{7}{8}$	$6\frac{3}{8}$
$11\frac{1}{2}$	$6\frac{1}{4}$	$12\frac{3}{8}$	$6\frac{5}{8}$
12	$6\frac{1}{2}$	$12\frac{7}{8}$	$6\frac{7}{8}$

Cutting sizes for the two at a time method.

The corner squares are cut the corner squares as above – i.e. $\frac{1}{2}$ inch larger than half the finished size of the unit.

For the smaller triangles cut two rectangles - $\frac{1}{2}$ inch larger than half the finished size of the unit by the finished size.

For the larger triangle cut a rectangle the finished size plus $\frac{1}{2}$ inch by the finished size plus $1\frac{1}{2}$ inches.

Finished size of unit	Size of corner square	Size of rectangle for small triangles	size of rectangle for large triangle
2	$1\frac{1}{2}$	$1\frac{1}{2} \times 2$	$2\frac{1}{2} \times 3\frac{1}{2}$
$2\frac{1}{2}$	$1\frac{3}{4}$	$1\frac{3}{4} \times 2\frac{1}{2}$	3×4
3	2	2×3	$3\frac{1}{2} \times 4\frac{1}{2}$
$3\frac{1}{2}$	$2\frac{1}{4}$	$2\frac{1}{4} \times 3\frac{1}{2}$	4×5
4	$2\frac{1}{2}$	$2\frac{1}{2} \times 4$	$4\frac{1}{2} \times 5\frac{1}{2}$
$4\frac{1}{2}$	$2\frac{3}{4}$	$2\frac{3}{4} \times 4\frac{1}{2}$	5×6
5	3	3×5	$5\frac{1}{2} \times 6\frac{1}{2}$
$5\frac{1}{2}$	$3\frac{1}{4}$	$3\frac{1}{4} \times 5\frac{1}{2}$	6×7
6	$3\frac{1}{2}$	$3\frac{1}{2} \times 6$	$6\frac{1}{2} \times 7\frac{1}{2}$
$6\frac{1}{2}$	$3\frac{3}{4}$	$3\frac{3}{4} \times 6\frac{1}{2}$	7×8
7	4	4×7	$7\frac{1}{2} \times 8\frac{1}{2}$
$7\frac{1}{2}$	$4\frac{1}{4}$	$4\frac{1}{4} \times 7\frac{1}{2}$	8×9
8	$4\frac{1}{2}$	$4\frac{1}{2} \times 8$	$8\frac{1}{2} \times 9\frac{1}{2}$
$8\frac{1}{2}$	$4\frac{3}{4}$	$4\frac{3}{4} \times 8\frac{1}{2}$	9×10
9	5	5×9	$9\frac{1}{2} \times 10\frac{1}{2}$
$9\frac{1}{2}$	$5\frac{1}{4}$	$5\frac{1}{4} \times 9\frac{1}{2}$	10×11
10	$5\frac{1}{2}$	$5\frac{1}{2} \times 10$	$10\frac{1}{2} \times 11\frac{1}{2}$
$10\frac{1}{2}$	$5\frac{3}{4}$	$5\frac{3}{4} \times 10\frac{1}{2}$	11×12
11	6	6×11	$11\frac{1}{2} \times 12\frac{1}{2}$
$11\frac{1}{2}$	$6\frac{1}{4}$	$6\frac{1}{4} \times 11\frac{1}{2}$	12×13
12	$6\frac{1}{2}$	$6\frac{1}{2} \times 12$	$12\frac{1}{2} \times 13\frac{1}{2}$

You can download a free step-by-step photo tutorial for both methods to make these units at

<https://meadowsidedesign.files.wordpress.com/2018/01/s-and-t-tutorial.pdf>