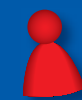
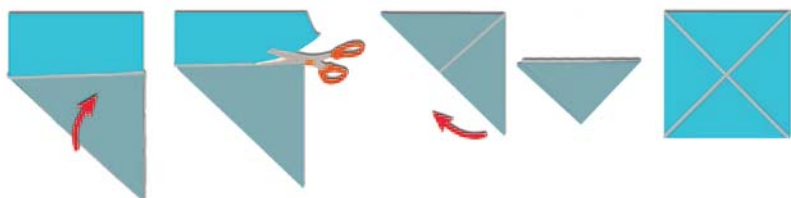


31 Squares from Rectangles

 Individual

Start Follow these steps to make a square with 2 diagonals.



First: Fold an $8\frac{1}{2}$ in. $\times$ 11 in. piece of paper so that the bottom edge lines up with the side as in the picture.

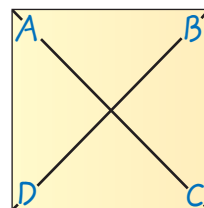
Second: Fold down the top flap and cut it off.

Third: Match the bottom right corner with the top left corner and make another fold.

Fourth: Unfold the paper.

1. Use 4 different-sized paper rectangles to see if the method above will work to create a square from any size rectangle. Does it work? Why or why not?

2. Take one paper square and label the four vertices as in the drawing. Darken the diagonals to see them better.



3. Copy the table below. Name the parallel and perpendicular line segments that are in your square and write them in your table.

Line Segments in My Square	
Parallel Line Segments	Perpendicular Line Segments
$\overline{AD}$ and $\overline{BC}$	$\overline{AB}$ and $\overline{AD}$

4. **Analyze** If you cut your square on one of the diagonals, two triangles are formed. Is the fold line that appears on one of the triangles a diagonal of the triangle? Explain.