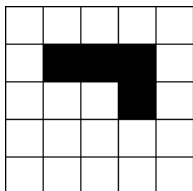


Rules

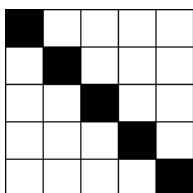
Your goal is to make all the possible shapes you can with five squares, but you must make them without any duplication. You need to figure out how many shapes there are on your own. You may use the grid on the second page, or you may use a sheet of graph paper.

1. You must use five squares for every pattern.



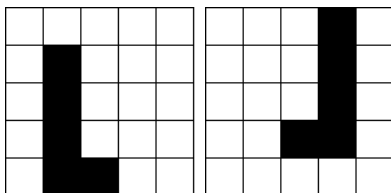
There aren't enough squares in this shape. It only uses four squares. It is okay to turn corners and have more than one side touching, but you must use **five** squares.

2. All five squares must touch side to side...no diagonals.



This shape isn't okay. It does have the required five squares, but none of them touch sides. They only touch corners. You must only use shapes with all five squares touching sides. No corners, no gaps.

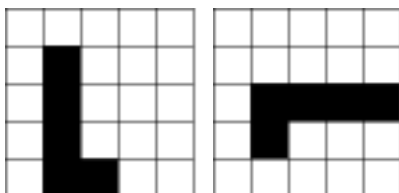
3. No repeats allowed...not even mirror images or rotated duplicates.



These two shapes are the same. They are mirror images, the second one is “flipped”, but it is the same shape.

You can use any part of the grid to make your shapes, any sheet of graph paper will work, too.

4. No duplicates by rotation.



You cannot just rotate or “tip over” a shape as has been shown here. This shape has the needed five squares, but the second image is rotated to the right. Rotating to the left would also be the same shape again.

Grid Worksheet

[There are more grids than are needed. You must figure out how many there are, though.]

