

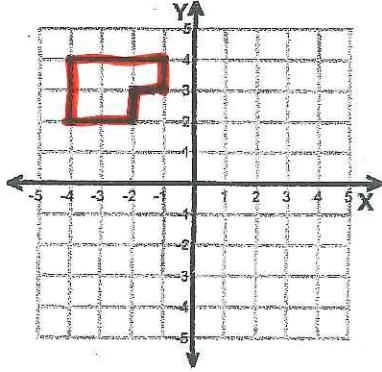
Rotations (9-3)

Name _____ Per. _____

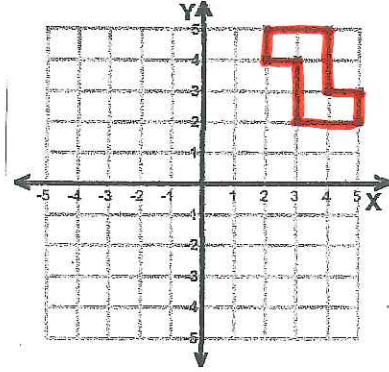
Part 1

ccw = counterclockwise

1) Rotation: 90° clockwise about the origin

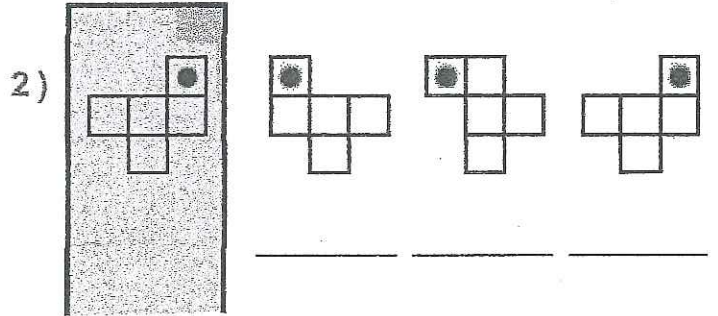
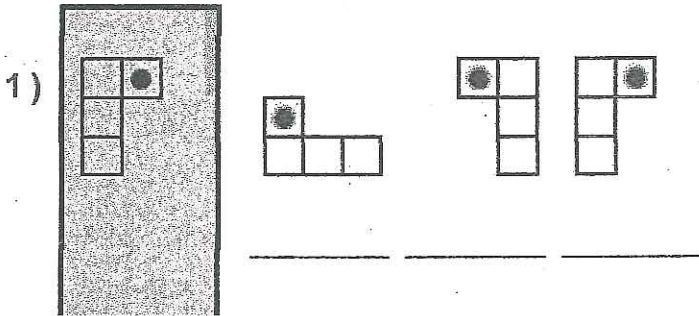


2) Rotation: 90° ccw about the origin



Part 2

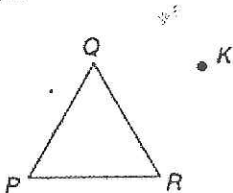
Identify each shape as translation, rotation, and reflection.



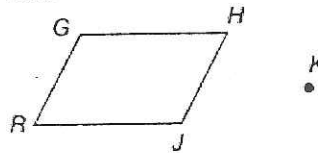
Part 3

Use a protractor and ruler to draw the specified rotation of each figure about point K .

1. 30°



2. 150°



Graph each figure and its image after the specified rotation about the origin.

3. $\triangle STU$ has vertices $S(2, -1)$, $T(5, 1)$ and $U(3, 3)$; 90° *clockwise*

4. $\triangle DEF$ has vertices $D(-4, 3)$, $E(1, 2)$, and $F(-3, -3)$; 180°