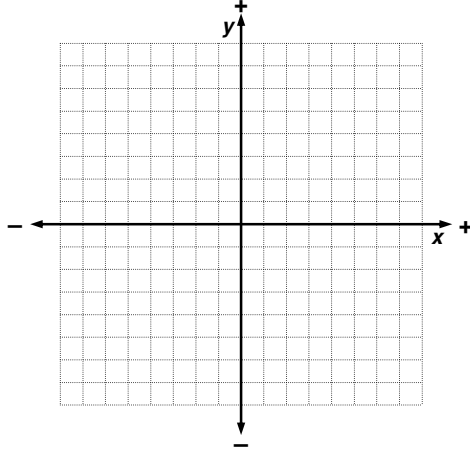


More With Rotations: Classwork

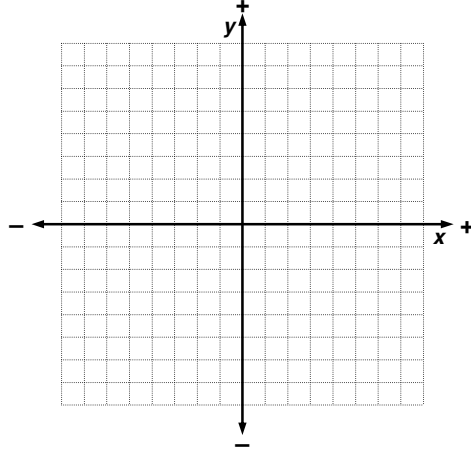
1. a. The points $A(3, 0)$, $B(7, 0)$, $C(7, 4)$, and $D(3, 4)$ form a square. Draw the square.

Now rotate the square 90° counterclockwise about the origin. Label the points.



- b. The points $E(-1, -3)$, $F(-7, -7)$, and $G(-5, 2)$ form a triangle. Draw the triangle.

Now rotate the triangle 90° counterclockwise about the origin. Label the points.



2. In #1, you rotated points 90° counterclockwise about the origin. Complete the table for the coordinates of each point's image.

a.

Original Points	Image Points
$A(3, 0)$	
$B(7, 0)$	
$C(7, 4)$	
$D(3, 4)$	

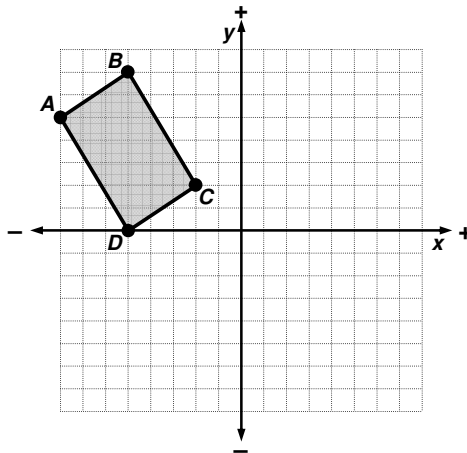
b.

Original Points	Image Points
$E(-1, -3)$	
$F(-7, -7)$	
$G(-5, 2)$	

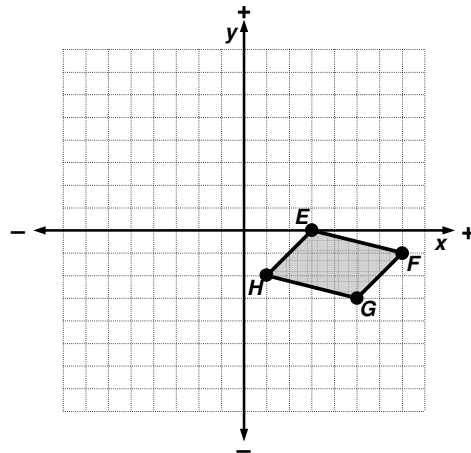
- c. Based on the tables, explain the rule for finding the coordinates of a point rotated 90° counterclockwise about the origin.

3. Draw the following rotations. Be sure to label the points on your image!

- a. Rotate the parallelogram 90° counterclockwise about the origin.

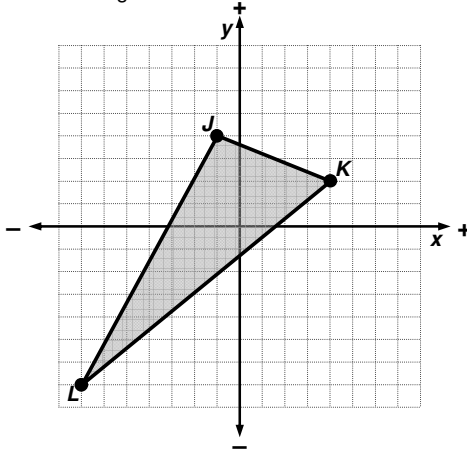


- b. Rotate the parallelogram 90° counterclockwise about the origin.

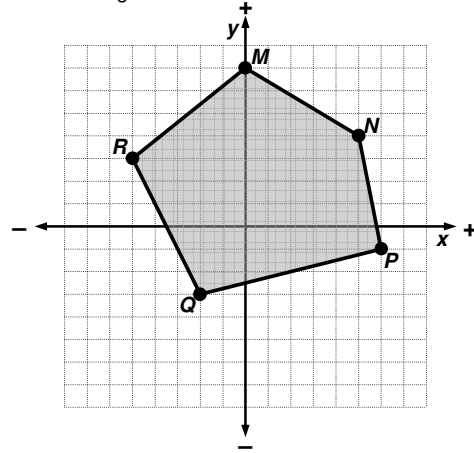


4. Draw the following rotations. Label the points.

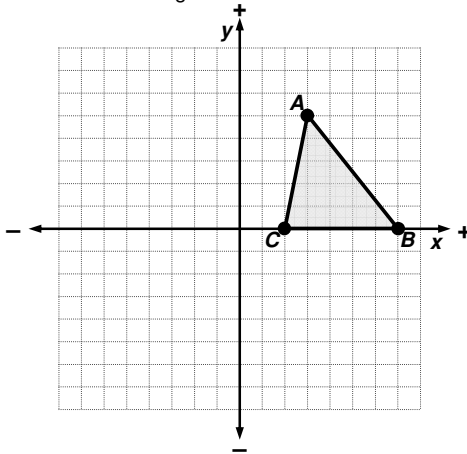
a. Rotate the triangle 90° clockwise about the origin.



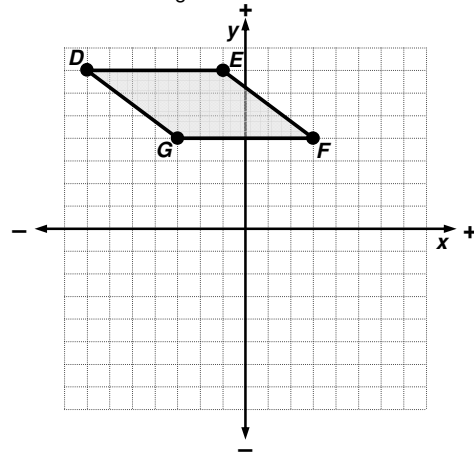
b. Rotate the pentagon 90° clockwise about the origin.



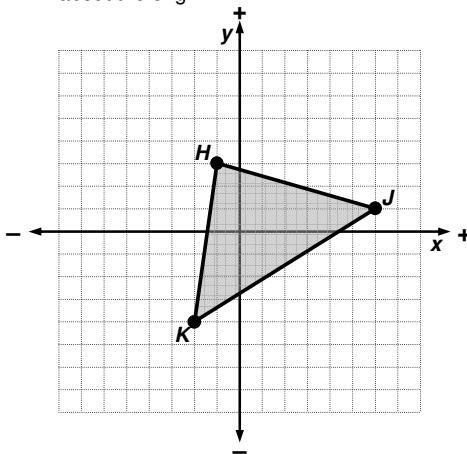
c. Rotate the triangle 180° counterclockwise about the origin.



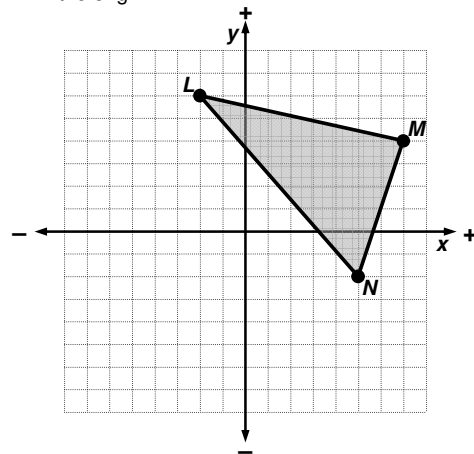
d. Rotate the parallelogram 180° clockwise about the origin.



e. Rotate the triangle 270° counterclockwise about the origin.



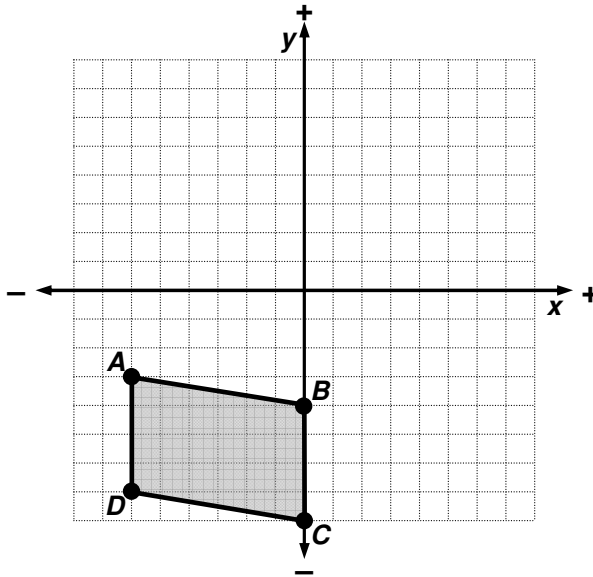
f. Rotate the triangle 270° clockwise about the origin.



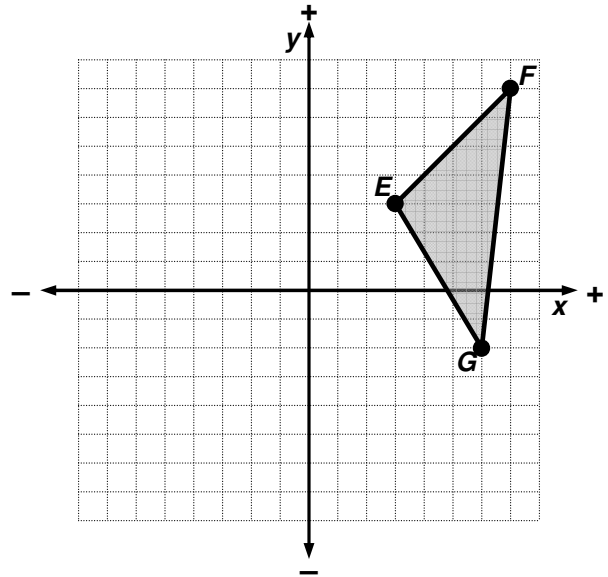
More With Rotations: Homework

5. Draw the following rotations. Be sure to label the points on your image!

a. Rotate the parallelogram 90° counterclockwise about the origin.

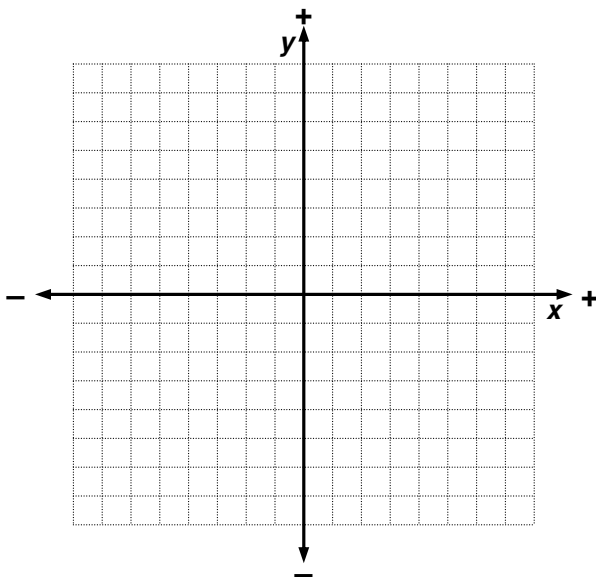


b. Rotate the triangle 90° counterclockwise about the origin.



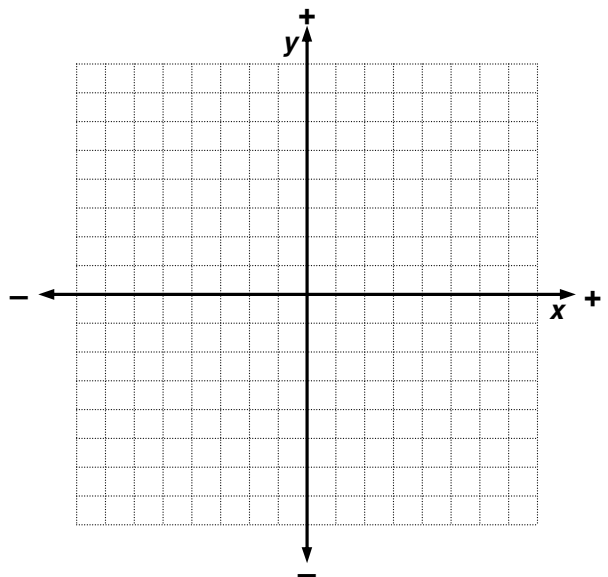
c. The points $A(4, 2)$, $B(4, 7)$, $C(0, 7)$, and $D(0, 2)$ form a rectangle. Draw the rectangle.

Now rotate the rectangle 90° counterclockwise about the origin. Label the points.



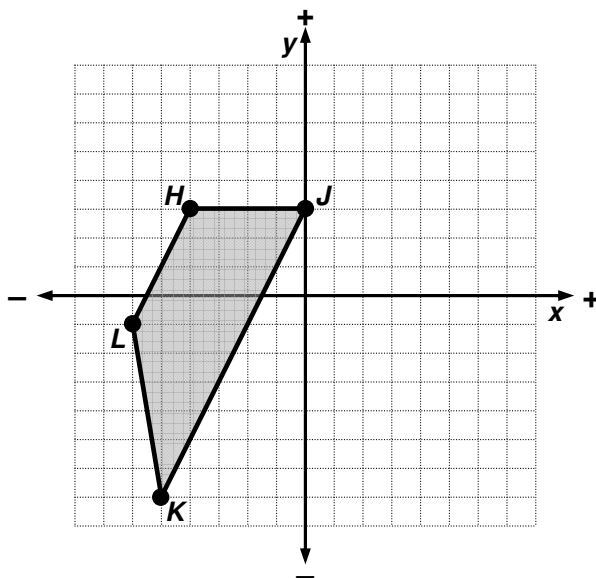
d. The points $E(2, 4)$, $F(0, 6)$, and $G(-8, 0)$ form a triangle. Draw the triangle.

Now rotate the triangle 90° counterclockwise about the origin. Label the points.

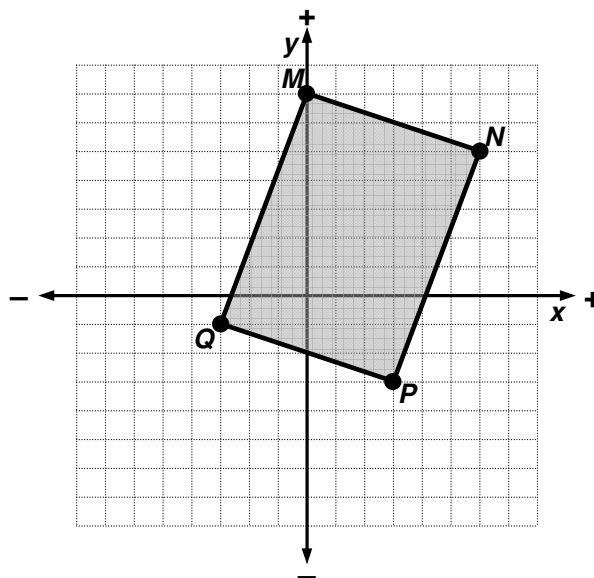


6. Draw the following reflections. Be sure to label the points on your image!

a. Reflect the trapezoid across the x -axis.



b. Reflect the parallelogram across the y -axis.



c. The points $H(1, 5)$, $J(5, -7)$, and $K(-6, 2)$ form a triangle. Draw the triangle.

Now reflect the triangle across the x -axis. Label the points.

