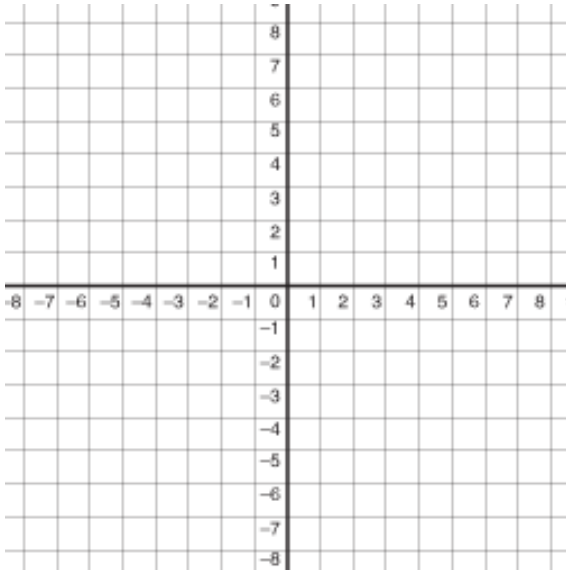


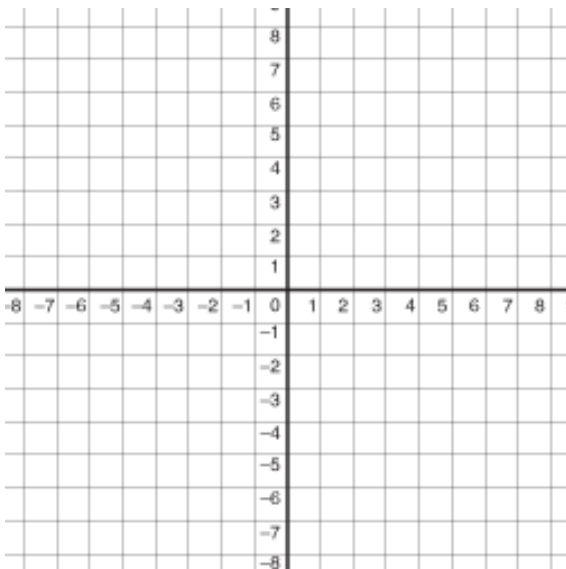
1. Graph quadrilateral REKT with vertices R(-5, -1), E(-3, -2), K(4, 0) and T(2, 5) and its image after the translation:

$$(x, y) \rightarrow (x + 2, y)$$

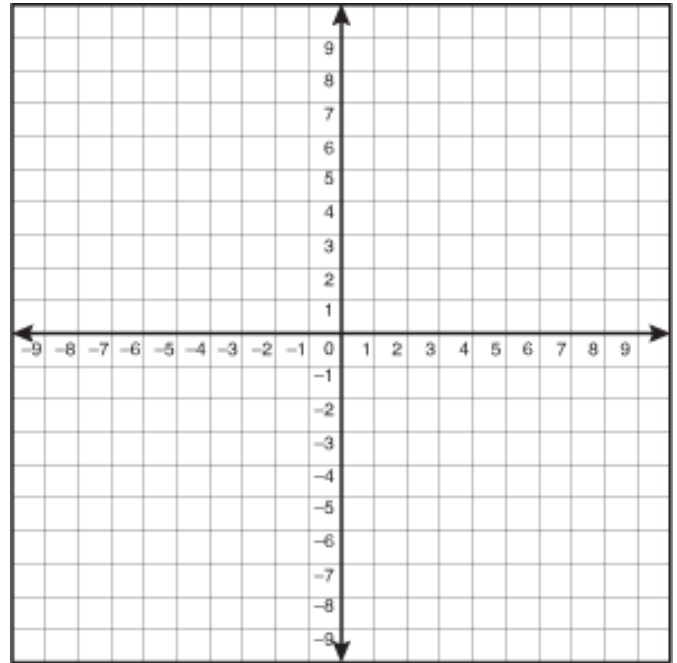


2. Find the component form of the vector that translates J(4, 5) to J'(-1, -6).

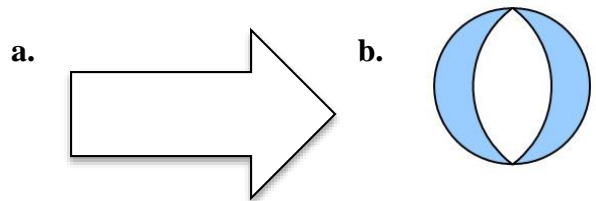
3. Graph $\triangle MEH$ with vertices M(-4, 2), E(3, 6) and H(2, -2) and its image after a reflection in the line $y = -x$



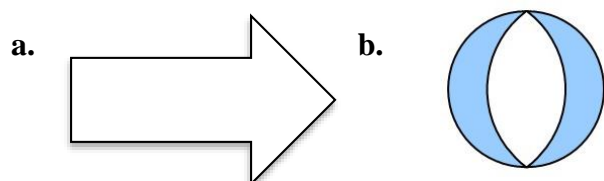
4. Graph $\triangle PAC$ with vertices P(-2, -1), A(-3, 4), and C(5, 2) and its image after a reflection in the line $x = 3$.



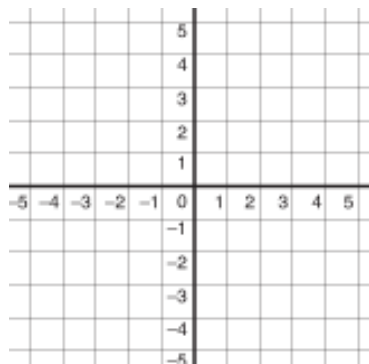
5. Determine if the figure has line symmetry. If so, draw ALL lines of symmetry on the figure.



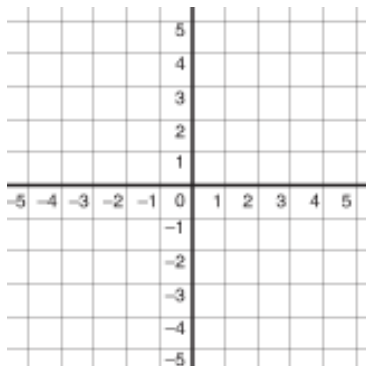
6. Determine if the figure has rotational symmetry. If so, find the SMALLEST angle of rotational symmetry for the figure.



7. Graph $\triangle PEN$ with vertices $P(2, 1)$, $E(-3, 1)$, and $N(0, 4)$ and its image after a 90° rotation clockwise about the origin

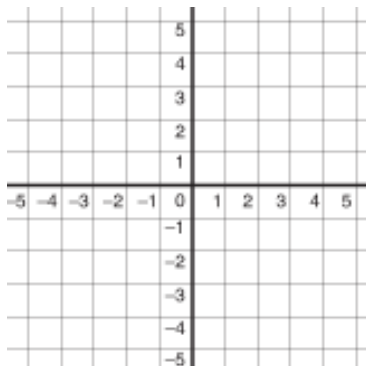


8. Graph quadrilateral $FGHI$ with vertices $F(-3, 2)$, $G(-3, -3)$, $H(1, -1)$ and $I(1, 1)$ and its image after a 90° rotation about the origin



9. Graph $\triangle IDK$ with vertices $I(3, 2)$, $D(1, -1)$, and $K(-2, 3)$ and its image after the composition.
Highlight your FINAL image.

Rotation: 180° about the origin
Reflection: in the x-axis



KNOW THESE!!!

Complete the rules below for translations, reflections, and rotations we have learned this chapter.

Translations:

$$(x, y) \rightarrow (\quad , \quad)$$

Reflections in the lines:

$$\text{x-axis: } (x, y) \rightarrow (\quad , \quad)$$

$$\text{y-axis: } (x, y) \rightarrow (\quad , \quad)$$

$$y = x: (x, y) \rightarrow (\quad , \quad)$$

$$y = -x: (x, y) \rightarrow (\quad , \quad)$$

Rotations about the origin:

$$90^\circ: (x, y) \rightarrow (\quad , \quad)$$

$$180^\circ: (x, y) \rightarrow (\quad , \quad)$$

$$270^\circ: (x, y) \rightarrow (\quad , \quad)$$