

Section 1 Problem Set - Reflections

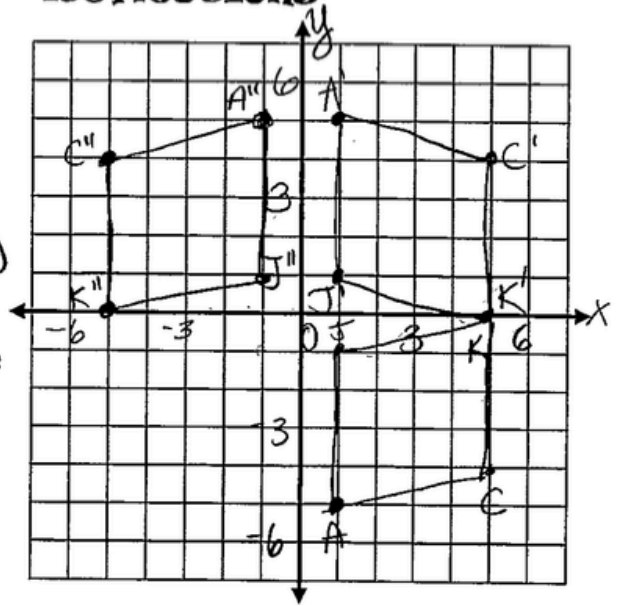
- 1.) Draw parallelogram $JACK$ with coordinates $J(1,-1)$, $A(1,-5)$, $C(5,-4)$, and $K(5,0)$.

- a.) Draw a reflection of $JACK$ in the x -axis. Label the vertices of each image. What are the new coordinates?

$$J'(1,1) \quad A'(1,5) \quad C'(5,4) \quad K'(5,0)$$

- b.) Draw a reflection of $J'A'C'K'$ in the y -axis. Label the vertices of each image. What are the new coordinates?

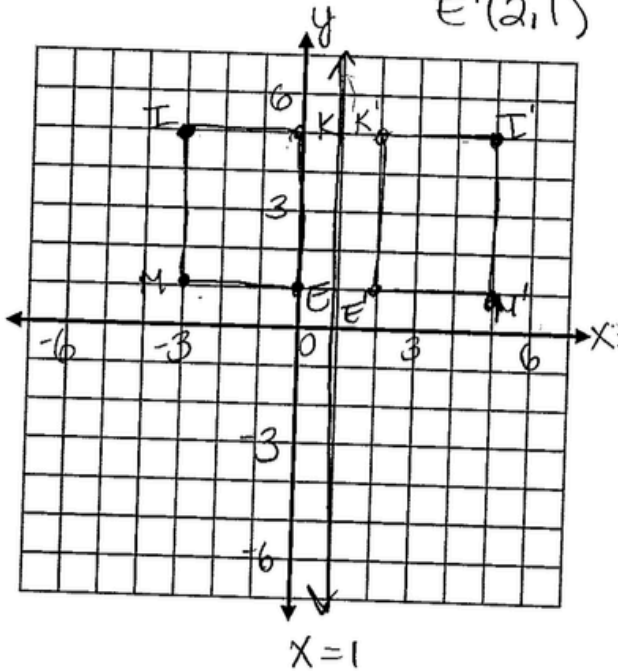
$$J''(-1,1) \quad A''(-1,5) \quad C''(-5,4) \quad K''(-5,0)$$



4 Pre Unit 12 Packet - Algebra Enriched
Geometric Transformations & Piecewise Functions

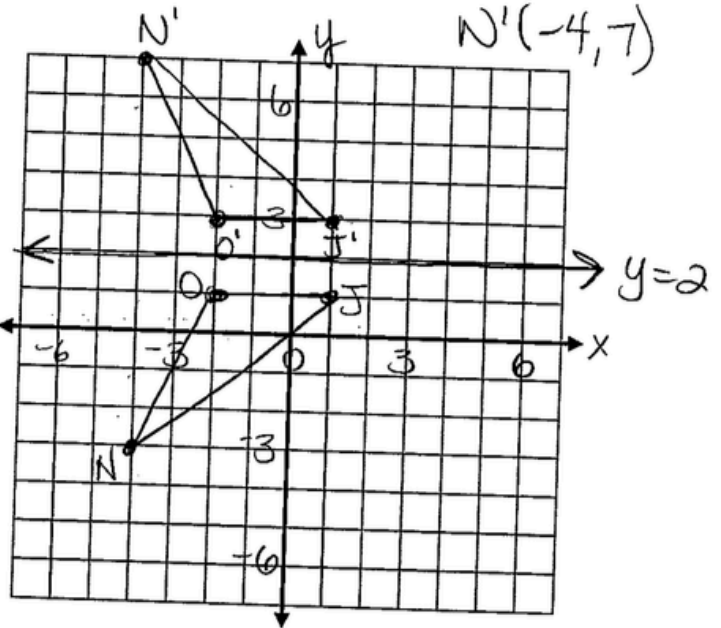
- 2.) Reflect rectangle $MIKE$ with coordinates $M(-3,1)$, $I(-3,5)$, $K(0,5)$, and $E(0,1)$ over the line $x = 1$. State the coordinates of the image.

$$M'(5,1) \quad I'(5,5) \quad K'(2,5) \quad E'(2,1)$$



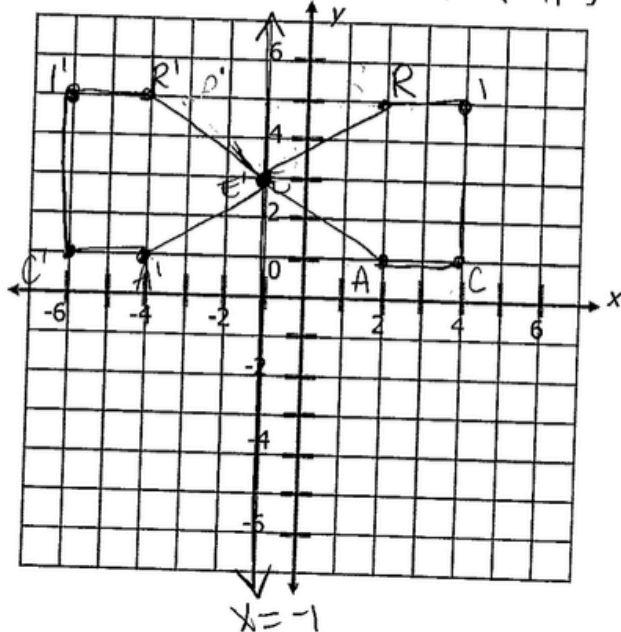
- 3.) Reflect $\triangle JON$ with coordinates $J(1,1)$, $O(-2,1)$, and $N(-4,-3)$ over the line $y = 2$. State the coordinates of the image.

$$J'(1,3) \quad O'(-2,3) \quad N'(-4,7)$$



- 4.) Reflect pentagon $ERICA$ with coordinates $E(-1,3)$, $R(2,5)$, $I(4,4)$, $C(4,1)$, $A(2,1)$ over the line $x = -1$. State the coordinates of the image.

$E'(-1,3)$ $R'(-4,5)$
 $I'(-6,4)$ $C'(-4,1)$
 $A'(-4,1)$



- 5.) Graph $\triangle PAM$ with coordinates $P(-3,1)$, $A(-7,-2)$, and $M(-3,-2)$. Graph $\triangle PAM$ after a reflection in the line $y = -x$. State the coordinates of the image.

$P'(-1,3)$
 $A'(2,7)$
 $M'(2,3)$

