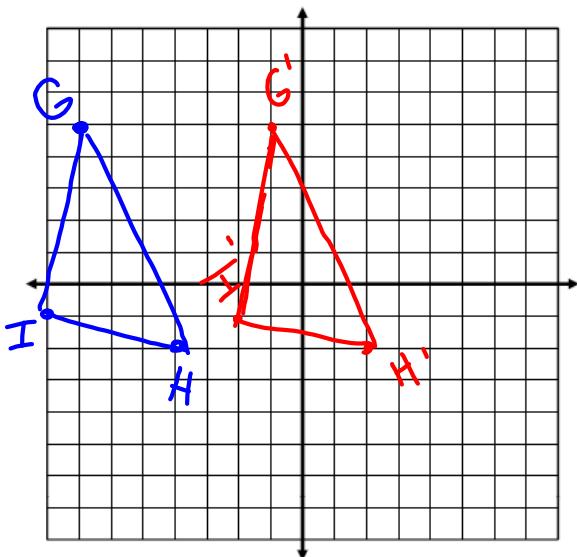


## Do Now

Triangle  $GHI$  with vertices  $G(-7, 5)$ ,  $H(-4, -2)$ , and  $I(-8, -1)$ :  $(x, y) \rightarrow (x + 6, y)$

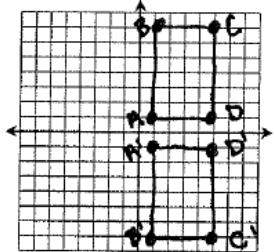


$$\begin{aligned}G' &(-1, 5) \\H' &(2, -2) \\I' &(-2, -1)\end{aligned}$$

Aug 30-12:01 PM

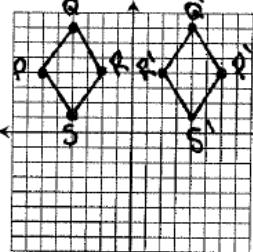
## Homework Answers

1. Rectangle  $ABCD$  with vertices  $A(1, 1)$ ,  $B(1, 7)$ ,  $C(5, 7)$ , and  $D(5, 1)$ :  $x\text{-axis}$



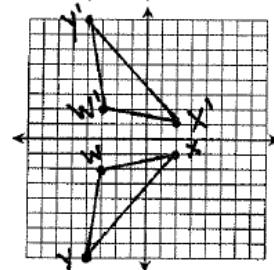
$$\begin{aligned}A' &(1, -1) \\B' &(1, -7) \\C' &(5, -7) \\D' &(5, -1)\end{aligned}$$

2. Rhombus  $PQRS$  with vertices  $P(-6, 4)$ ,  $Q(-4, 7)$ ,  $R(-2, 4)$ , and  $S(-4, 1)$ :  $y\text{-axis}$



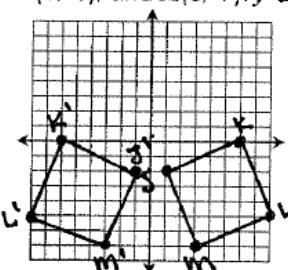
$$\begin{aligned}P' &(6, 4) \\Q' &(4, 7) \\R' &(2, 4) \\S' &(4, 1)\end{aligned}$$

3. Triangle  $WXY$  with vertices  $W(-3, -2)$ ,  $X(2, -1)$ , and  $Y(-4, -8)$ :  $x\text{-axis}$



$$\begin{aligned}W' &(-3, 2) \\X' &(2, 1) \\Y' &(-4, 8)\end{aligned}$$

4. Square  $JKLM$  with vertices  $J(1, -2)$ ,  $K(6, 0)$ ,  $L(8, -5)$ , and  $M(3, -7)$ :  $y\text{-axis}$



$$\begin{aligned}J' &(-1, -2) \\K' &(-6, 0) \\L' &(-8, -5) \\M' &(-3, -7)\end{aligned}$$

Feb 13-6:38 AM

## Reflections Day 2

Writing image points from a pre-image point without graphing.

If point A(-7, 9) reflects over the x-axis, what are the coordinates of A'?

$$\begin{array}{l} \text{x-axis reflection} \\ (x, y) \rightarrow (x, -y) \end{array} \quad A(-7, 9) \rightarrow A'(-7, -9)$$

If point B(-2, -3) reflects over the y-axis, what are the coordinates of B'?

$$\begin{array}{l} \text{y-axis reflection} \\ (x, y) \rightarrow (-x, y) \end{array} \quad B(-2, -3) \rightarrow B'(2, -3)$$

Aug 30-12:01 PM

Writing a reflection rule given a pre-image and image point.

$$1) W(-3, 7) \rightarrow W'(3, 7) \quad (x, y) \rightarrow (-x, y)$$

*reflection over  
y-axis*

$$2) P(-5, -3) \rightarrow P'(-5, 3) \quad (x, y) \rightarrow (x, -y)$$

*reflection over  
x-axis*

$$3) R(2, -3) \rightarrow R'(-2, -3)$$

*reflection over  
y-axis*

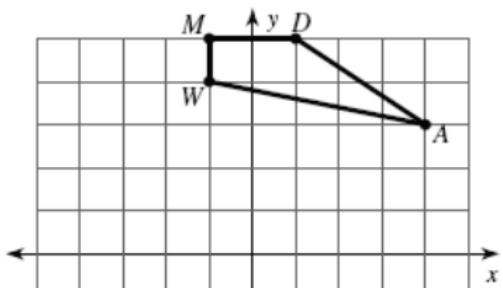
$$4) L(-3, -5) \rightarrow L'(3, -5)$$

*reflection over  
y-axis*

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

Feb 5-1:20 PM

## 1. Reflect over the x-axis



M' (-1, 5)  
D' (2, 5)  
W' (-1, 4)  
A' (4, -3)

Aug 30-12:01 PM