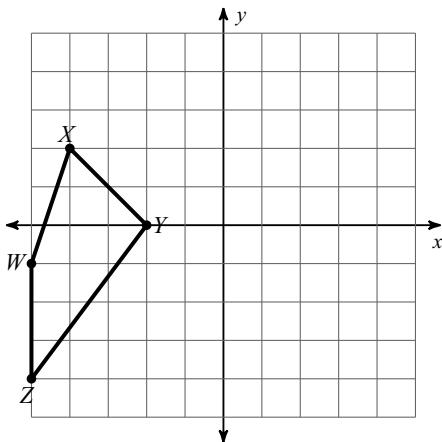


## 8.G.3 Skills Check

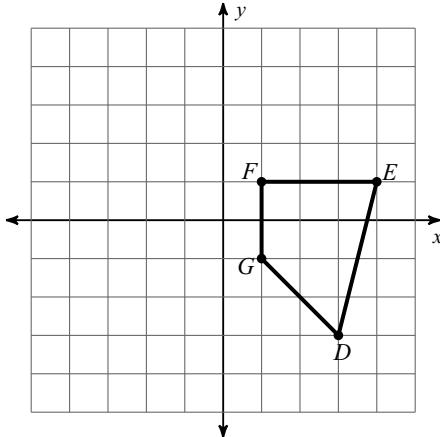
Date \_\_\_\_\_ Period \_\_\_\_\_

**Graph the image of the figure using the transformation given.**

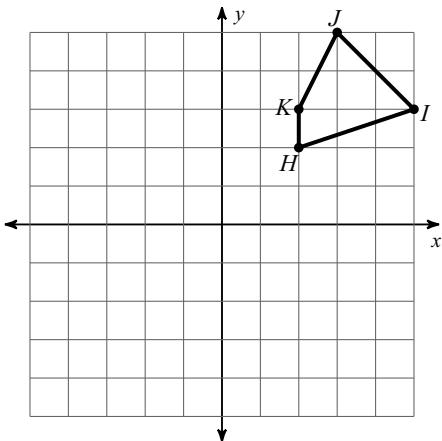
- 1) translation:
- $(x, y) \rightarrow (x + 5, y)$



- 2) reflection across
- $y = x$

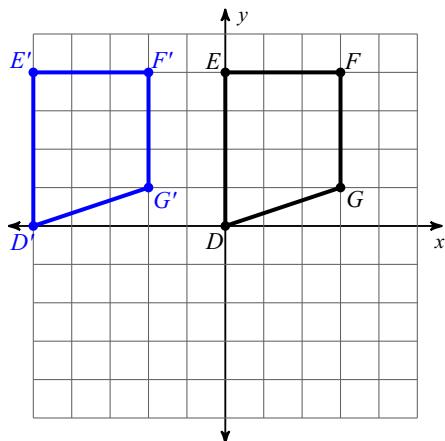


- 3) rotation
- $90^\circ$
- clockwise about the origin

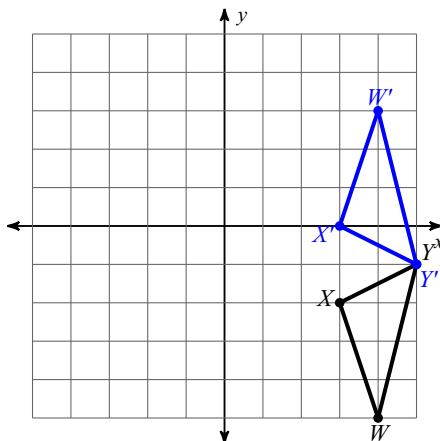


**Write a rule to describe each transformation.**

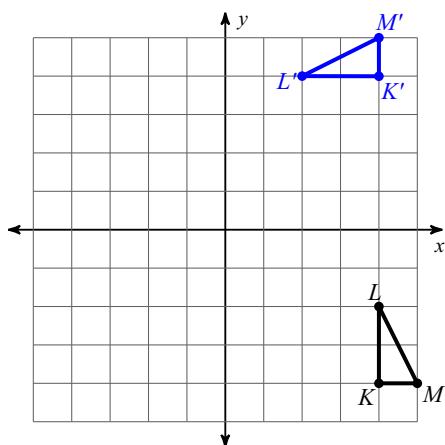
4)



5)



6)



**Find the coordinates of the vertices of each figure after the given transformation.**

7) reflection across the x-axis

$$D(-5, -5), E(-3, 0), F(-2, -4)$$

8) rotation 180° about the origin

$$A(-4, -2), B(-2, 0), C(0, -5)$$

9) translation:  $(x, y) \rightarrow (x - 3, y - 6)$

$$H(-1, 2), I(2, 3), J(3, 1)$$

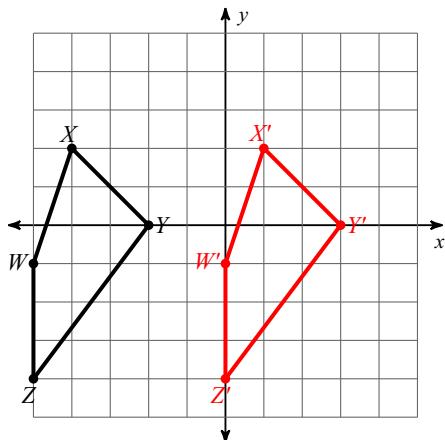
## 8.G.3 Skills Check

Date \_\_\_\_\_

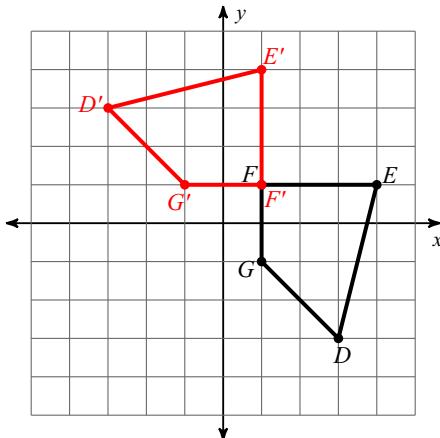
Period \_\_\_\_\_

**Graph the image of the figure using the transformation given.**

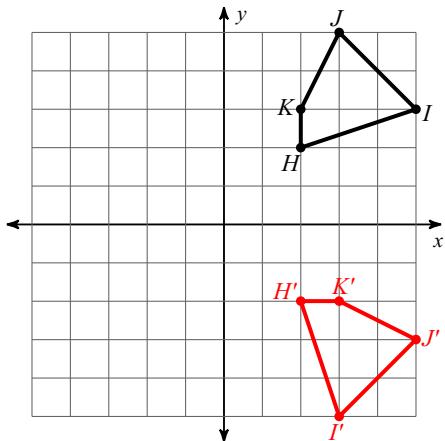
- 1) translation:
- $(x, y) \rightarrow (x + 5, y)$



- 2) reflection across
- $y = x$

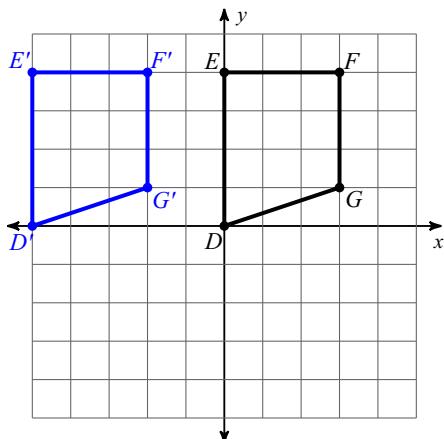


- 3) rotation
- $90^\circ$
- clockwise about the origin



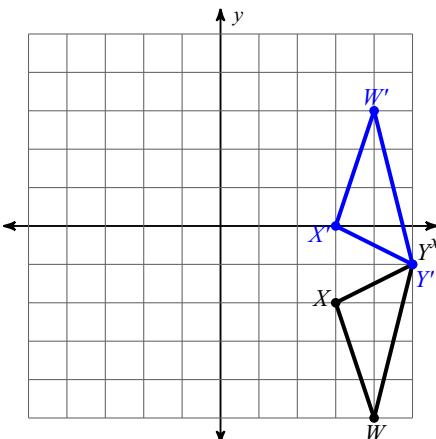
**Write a rule to describe each transformation.**

4)



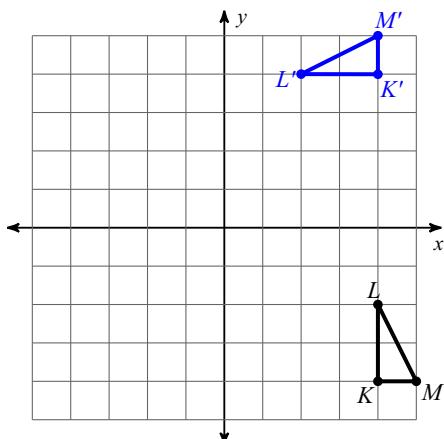
translation:  $(x, y) \rightarrow (x - 5, y)$

5)



reflection across  $y = -1$

6)



rotation  $90^\circ$  counterclockwise about the origin

**Find the coordinates of the vertices of each figure after the given transformation.**

7) reflection across the x-axis

$$D(-5, -5), E(-3, 0), F(-2, -4)$$

$$E'(-3, 0), F'(-2, 4), D'(-5, 5)$$

8) rotation  $180^\circ$  about the origin

$$A(-4, -2), B(-2, 0), C(0, -5)$$

$$A'(4, 2), B'(2, 0), C'(0, 5)$$

9) translation:  $(x, y) \rightarrow (x - 3, y - 6)$

$$H(-1, 2), I(2, 3), J(3, 1)$$

$$H'(-4, -4), I'(-1, -3), J'(0, -5)$$