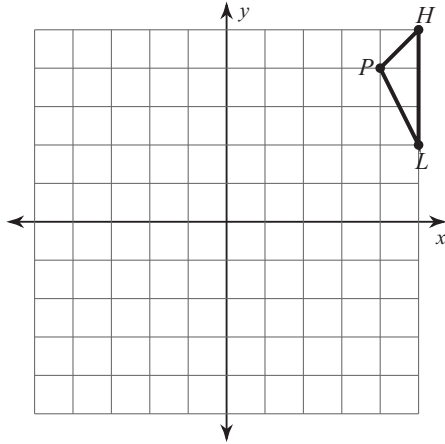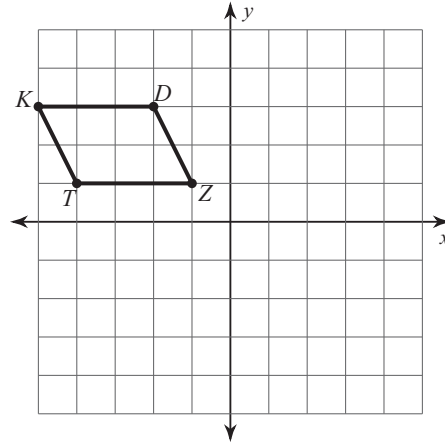Name_____ ID: 2

Date_____ Period_____

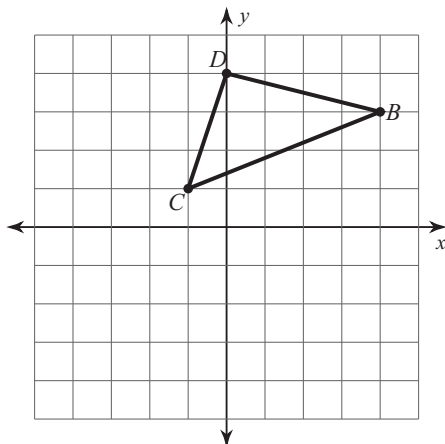## Graph the image of the figure using the transformation given.
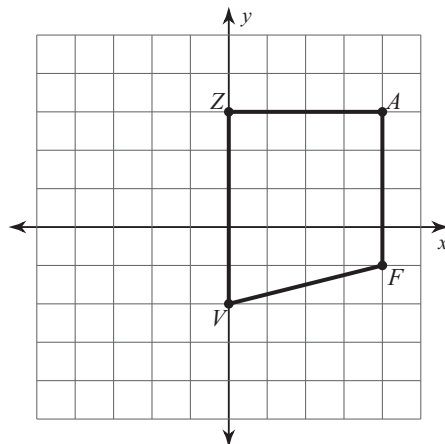
1) reflection across the y-axis

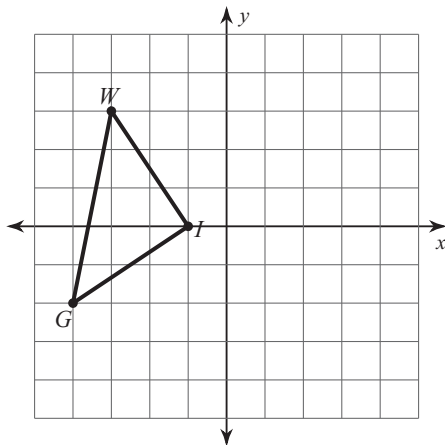2) reflection across the x-axis

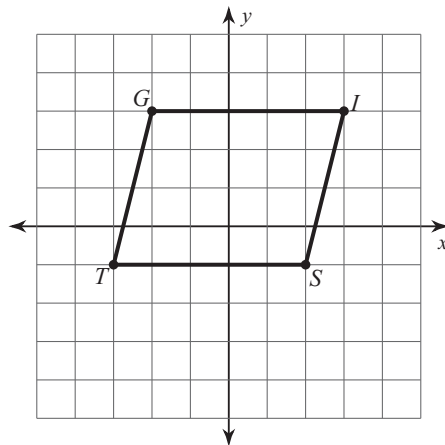3) reflection across the y-axis

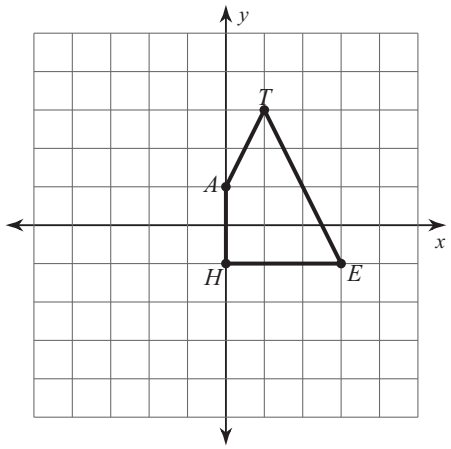4) reflection across the x-axis
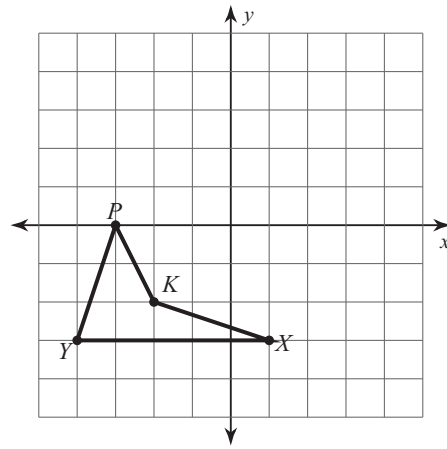

5) reflection across the y-axis
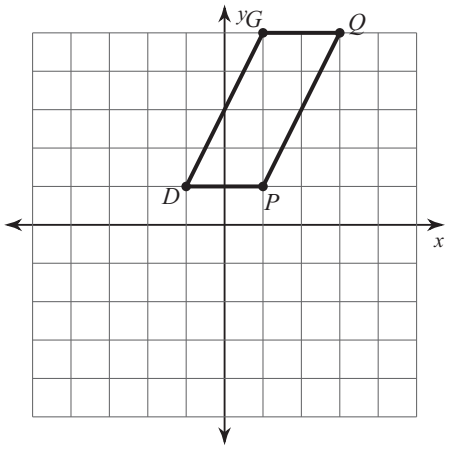

6) reflection across the y-axis

7) translation: $(x, y) \rightarrow (x - 5, y + 2)$
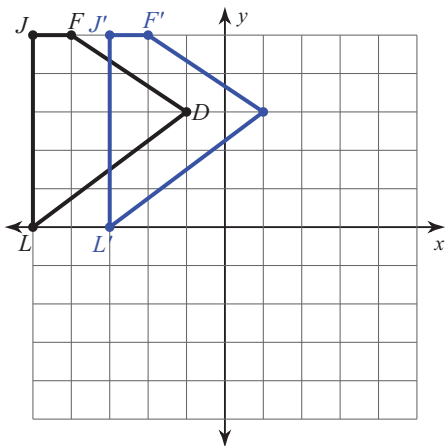
8) translation: $(x, y) \rightarrow (x + 1, y)$

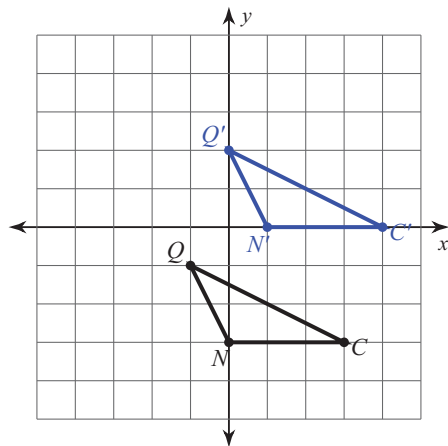9) translation: $(x, y) \rightarrow (x - 2, y - 1)$
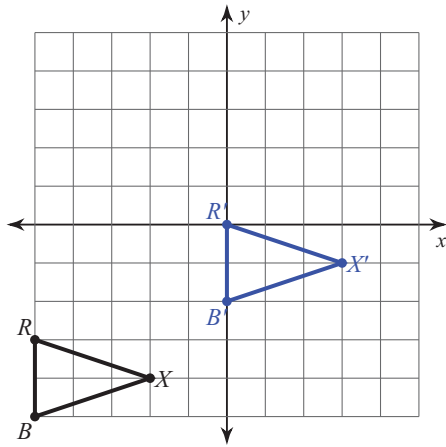
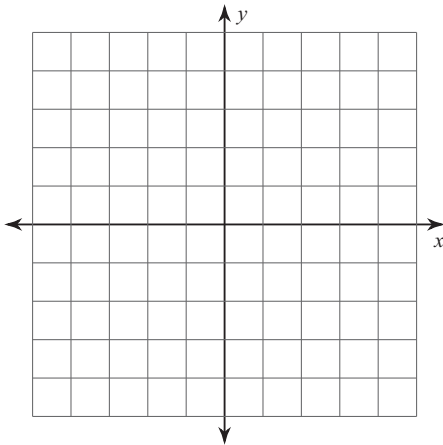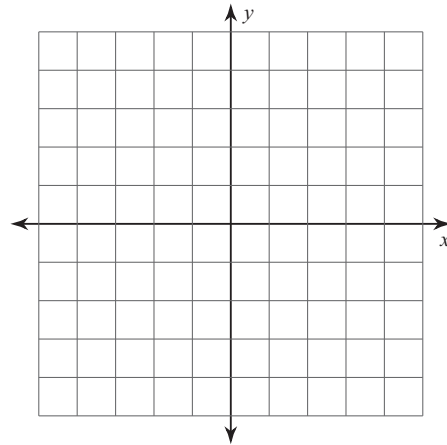**Write a rule to describe each transformation.**

10)

11)

12)

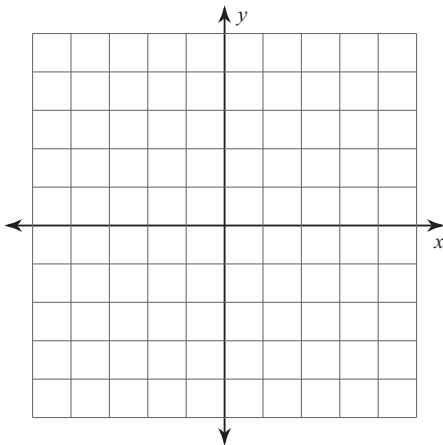**Graph the image of the figure using the transformation given.**

13) rotation 90° counterclockwise about the origin
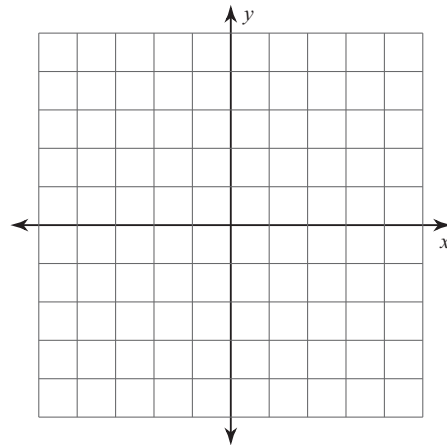$M(0, -4)$, $H(1, -2)$, $D(4, -2)$, $U(1, -5)$

14) rotation 180° about the origin
$Z(-4, 1)$, $L(-5, 4)$, $X(-2, 5)$, $U(-2, 4)$

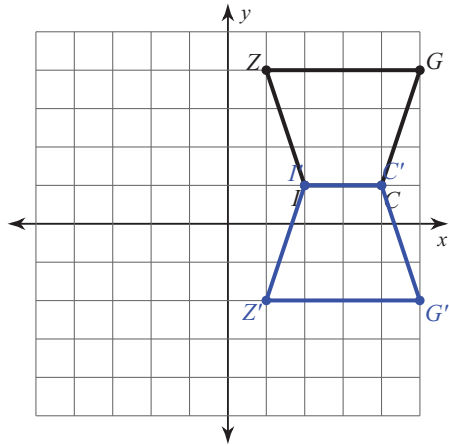15) rotation 180° about the origin
$C(-4, -4)$, $B(-4, -2)$, $S(1, -3)$

16) rotation 90° counterclockwise about the origin
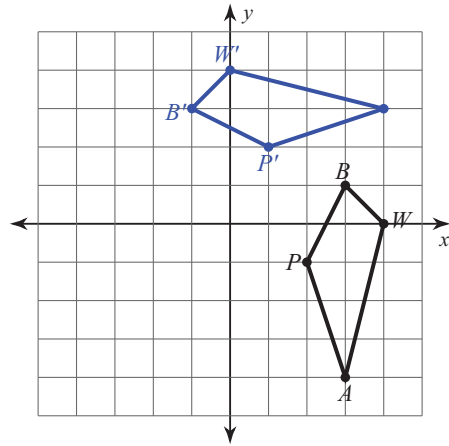$S(0, 1)$, $E(1, 3)$, $A(3, 1)$

Made with Infinite Geometry.

Write a rule to describe each transformation.

17)

18)

19)

20)

Name_____ ID: 2

Date_____ Period_____

Graph the image of the figure using the transformation given.

1) reflection across the y-axis

2) reflection across the x-axis

3) reflection across the y-axis

4) reflection across the x-axis

5) reflection across the y-axis

6) reflection across the y-axis

7) translation: $(x, y) \rightarrow (x - 5, y + 2)$

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

9) translation: $(x, y) \rightarrow (x - 2, y - 1)$

Write a rule to describe each transformation.

10)

translation: 2 units right

11)

translation: 1 unit right and 3 units up
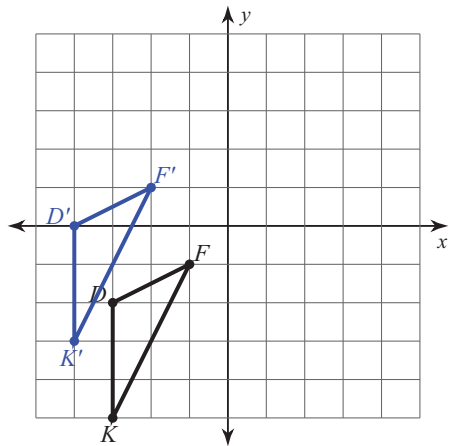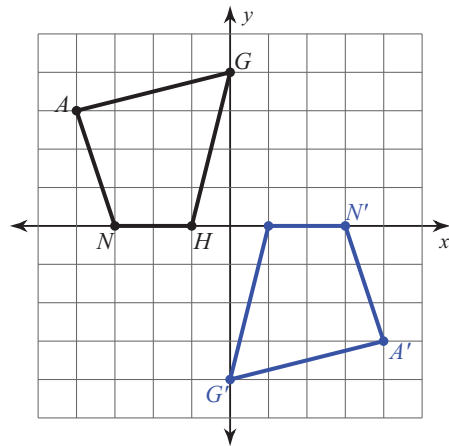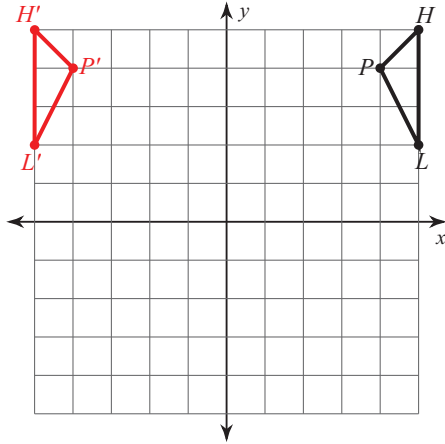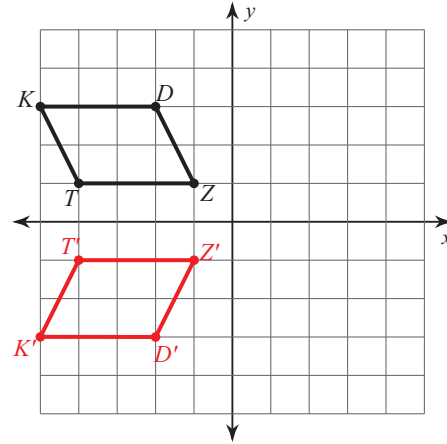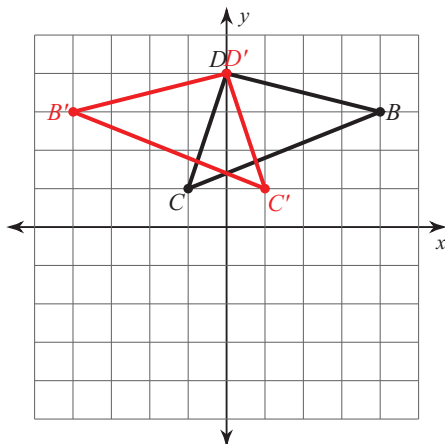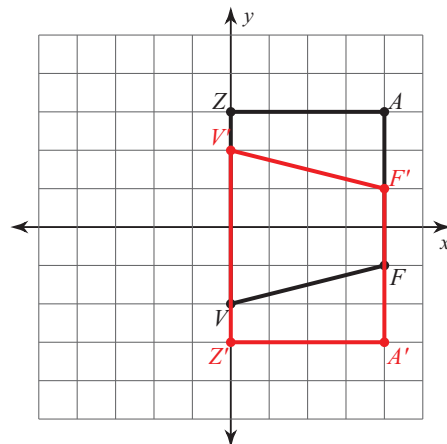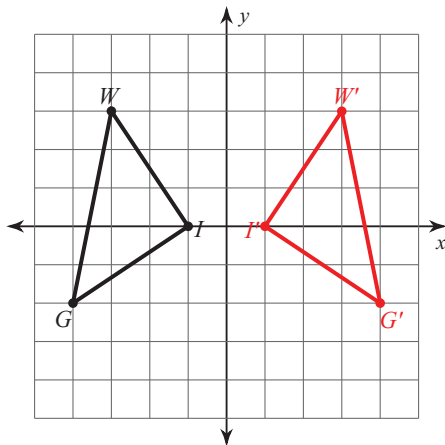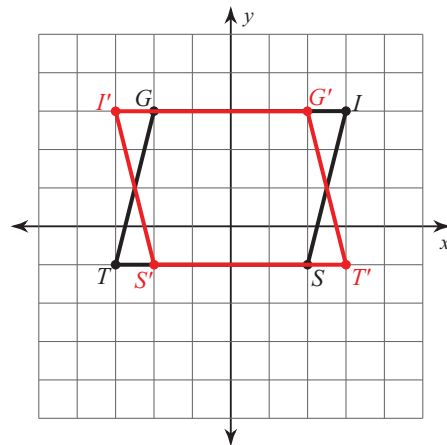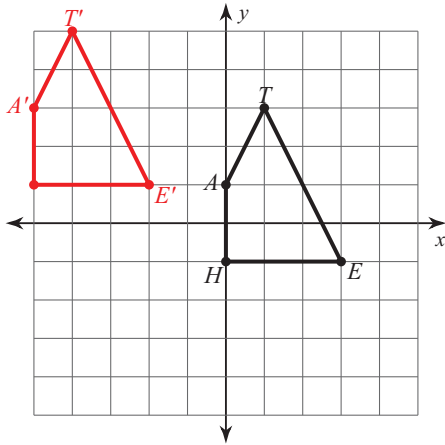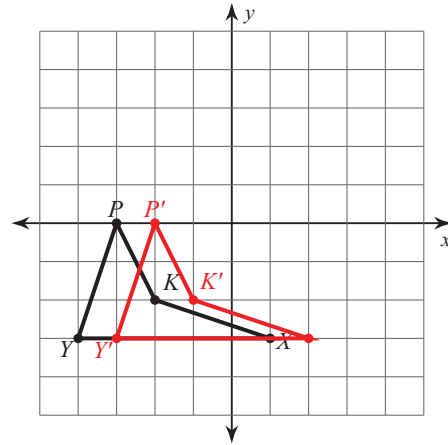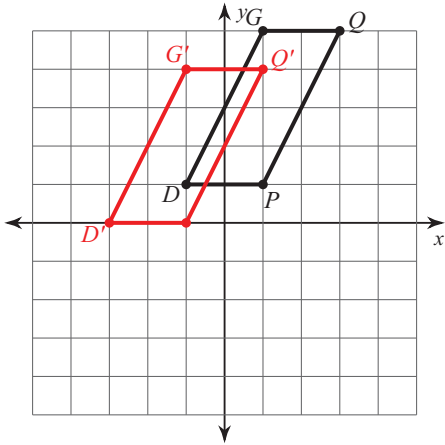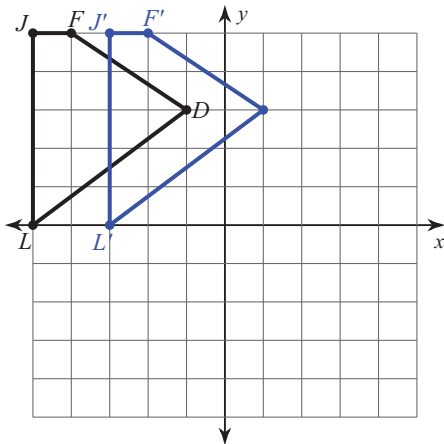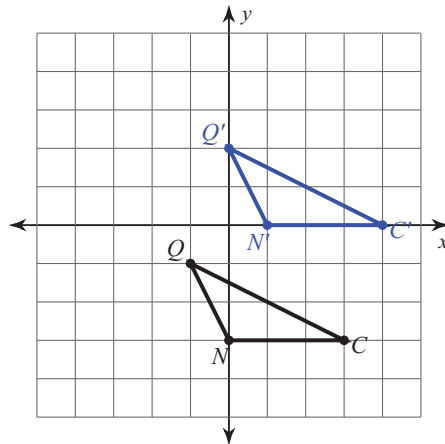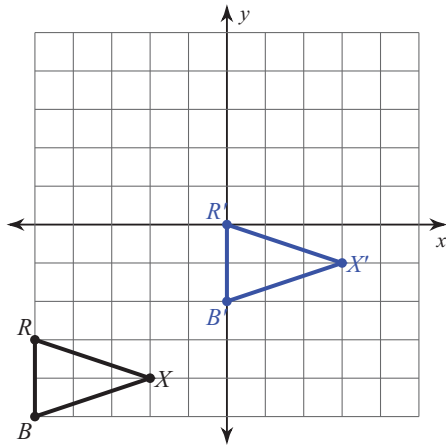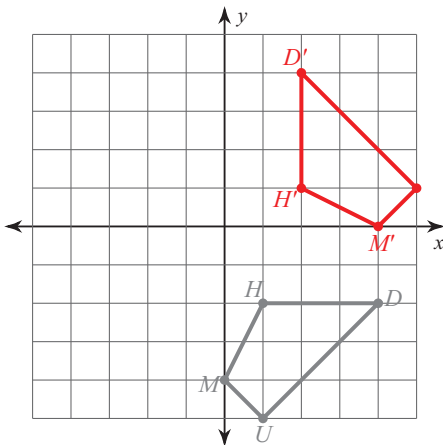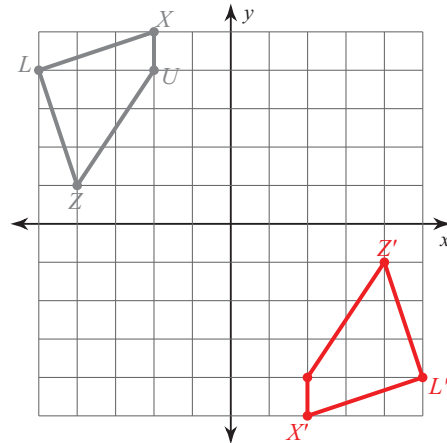
-2- Made with Infinite Geometry.

12)

translation: 5 units right and 3 units up

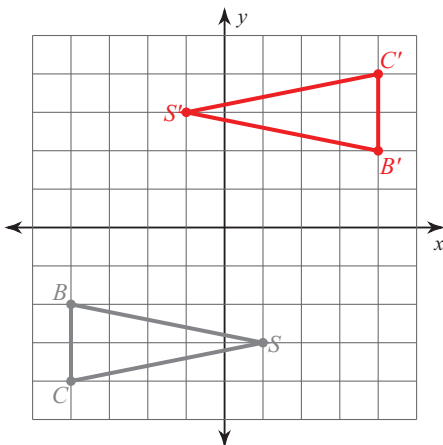## Graph the image of the figure using the transformation given.

13) rotation 90° counterclockwise about the origin
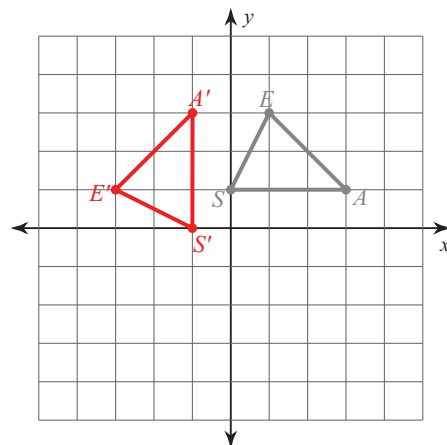
$M(0, -4), H(1, -2), D(4, -2), U(1, -5)$

14) rotation 180° about the origin

$Z(-4, 1), L(-5, 4), X(-2, 5), U(-2, 4)$

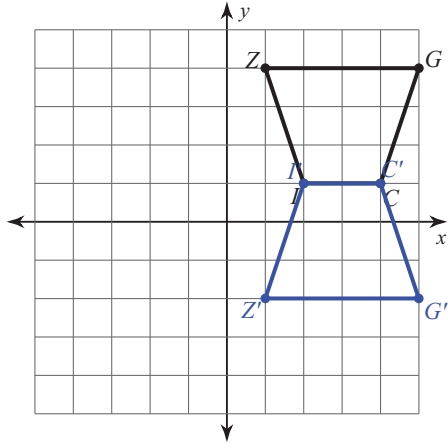15) rotation 180° about the origin

$C(-4, -4), B(-4, -2), S(1, -3)$

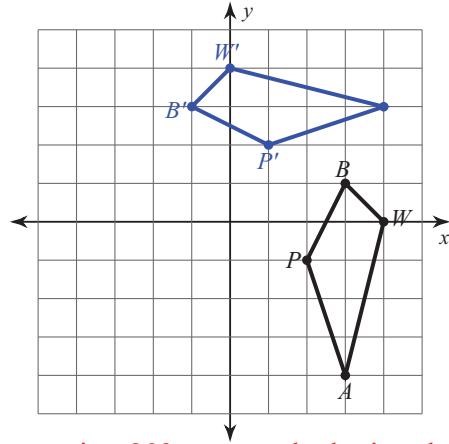16) rotation 90° counterclockwise about the origin

$S(0, 1), E(1, 3), A(3, 1)$

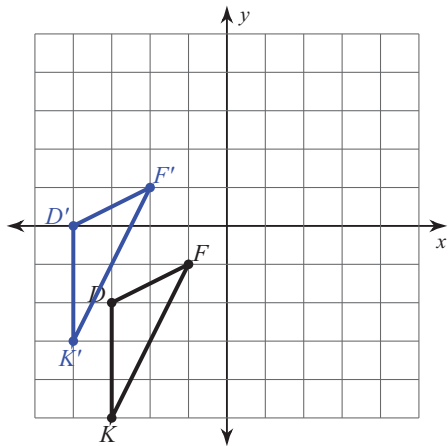**Write a rule to describe each transformation.**

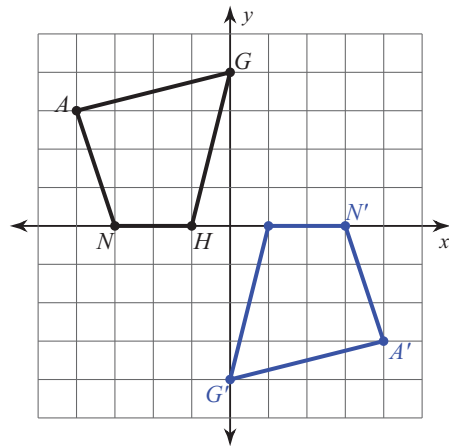17)

reflection across $y = 1$

18)

rotation 90° counterclockwise about the origin

19)

translation: 1 unit left and 2 units up

20)

rotation 180° about the origin

-4-