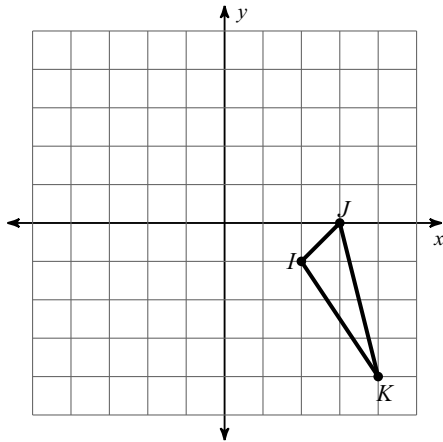


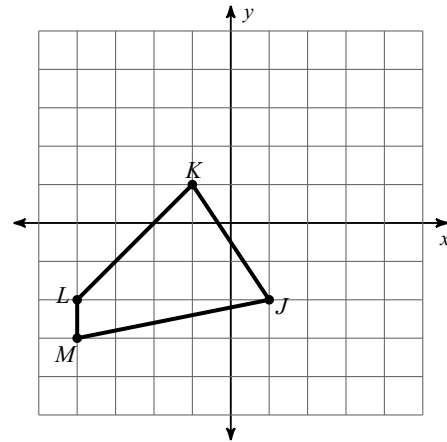
Transformations Review

Graph the image of the figure using the transformation given.

1) translation: $(x, y) \rightarrow (x - 3, y + 3)$



2) translation: $(x, y) \rightarrow (x + 3, y + 1)$



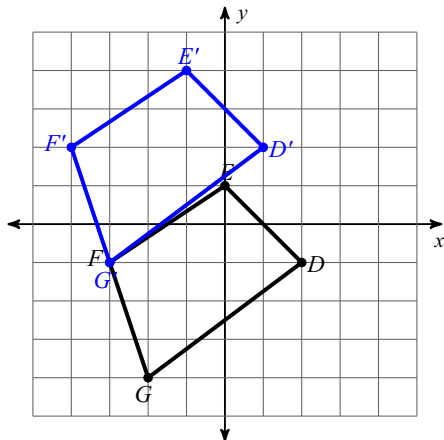
Find the coordinates of the vertices of each figure after the given transformation.

3) translation: $(x, y) \rightarrow (x - 2, y - 5)$
 $K(1, 3)$

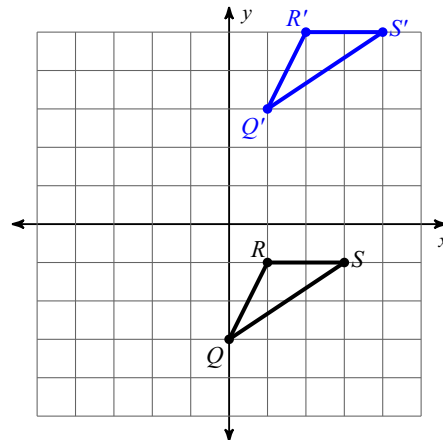
4) translation: $(x, y) \rightarrow (x - 4, y)$
 $E(2, 0), D(0, 5), C(3, 5), B(4, 2)$

Write a rule to describe each transformation.

5)

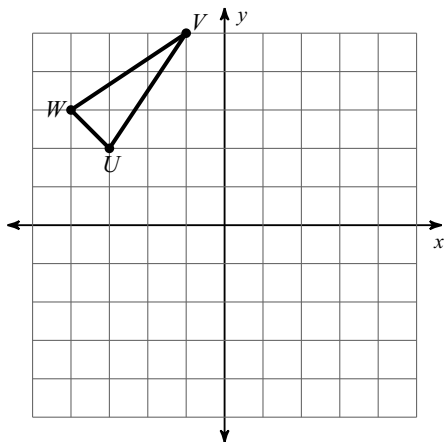


6)

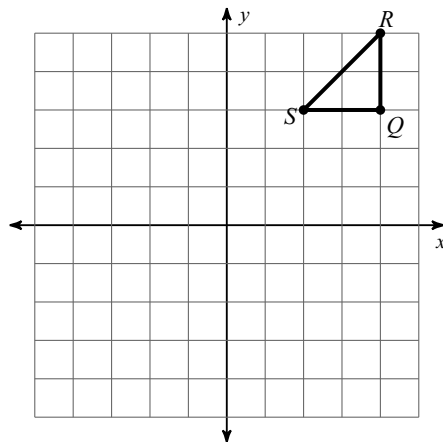


Graph the image of the figure using the transformation given.

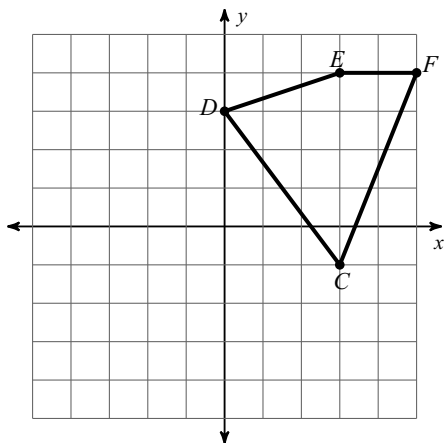
7) reflection across the y-axis



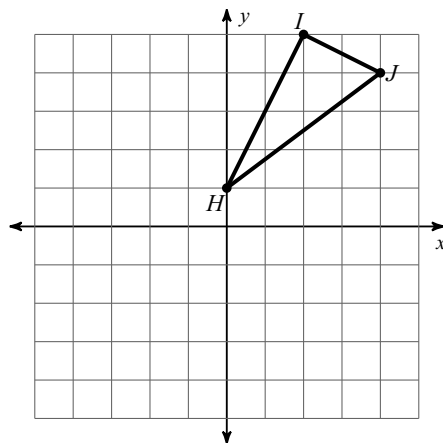
8) reflection across the x-axis



9) reflection across $y = -x$



10) reflection across $y = -x$



Write a rule to describe each transformation.

11) $J(-5, -1), I(-2, 2), H(0, -3)$
to
 $I(-2, 2), H(3, 0), J(1, 5)$

12) $I(-3, -5), H(-3, -4), G(-1, -4)$
to
 $H(3, -4), G(1, -4), I(3, -5)$

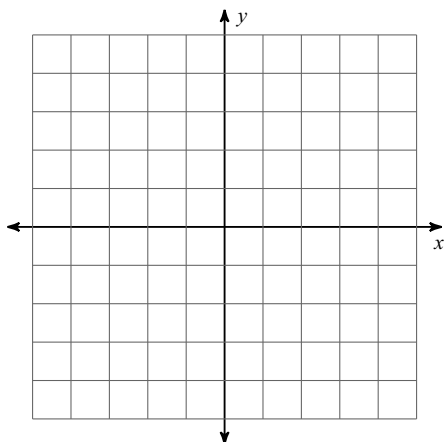
Find the coordinates of the vertices of each figure after the given transformation.

13) reflection across the x-axis
 $Z(2, -4), Y(5, 0), X(5, -3)$

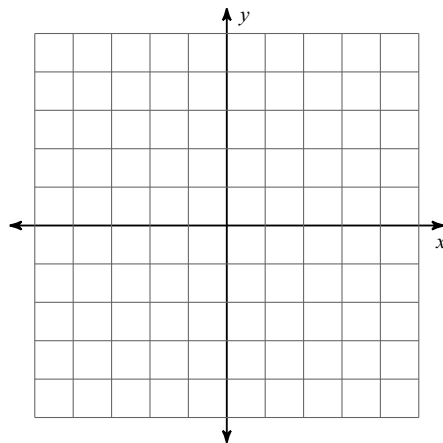
14) reflection across $y = x$
 $I(2, -4), J(1, -2), K(5, -4)$

Graph the image of the figure using the transformation given.

- 15) rotation 180° about the origin
 $G(0, 3), F(1, 5), E(4, 4)$



- 16) rotation 90° counterclockwise about the origin
 $F(-5, 2), E(-5, 4), D(-1, 5), C(-2, 1)$



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

- 17) rotation 180° about the origin
 $G(1, -5), F(1, -4), E(3, -5)$

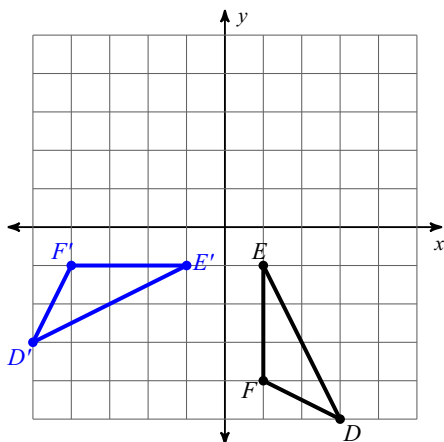
- 18) rotation 90° counterclockwise about the origin
 $A(0, -2), B(1, 1), C(4, -2), D(3, -4)$

Write a rule to describe each transformation.

- 19) $P(-1, 1), Q(-3, 4), R(-2, 5), S(0, 1)$
 to
 $P'(-1, -1), Q'(-4, -3), R'(-5, -2), S'(-1, 0)$

- 20) $S(-4, -1), T(-2, 3), U(0, 0), V(-3, -4)$
 to
 $S'(4, 1), T'(2, -3), U'(0, 0), V'(3, 4)$

21)



22)

