

Choose the best answer in each item. (Check the box of your answer.)

1. Which ordered pair is use to describe the translation that is:

1 units to the right and 5 units down?

a. $(-1, -5)$

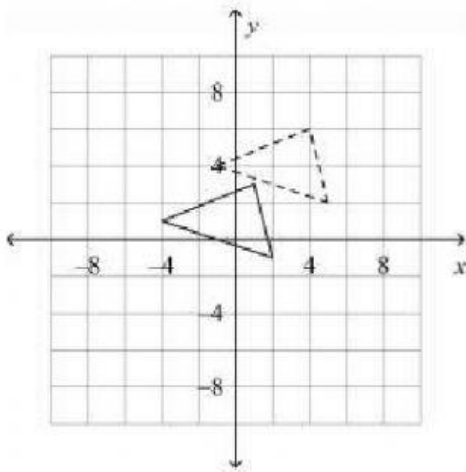
b. $(1, -5)$

c. $(-1, 5)$

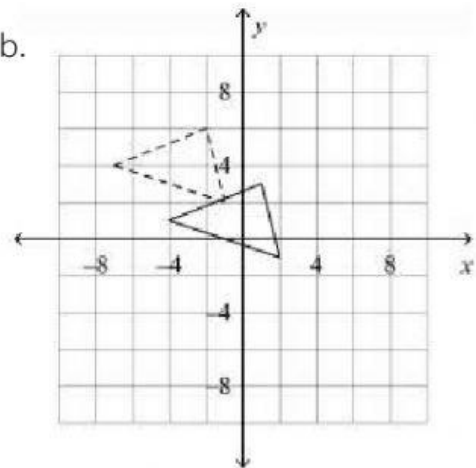
d. $(1, 5)$

2. Which translation from solid line figure to dashed line figure is given by the vector $(-3, 3)$?

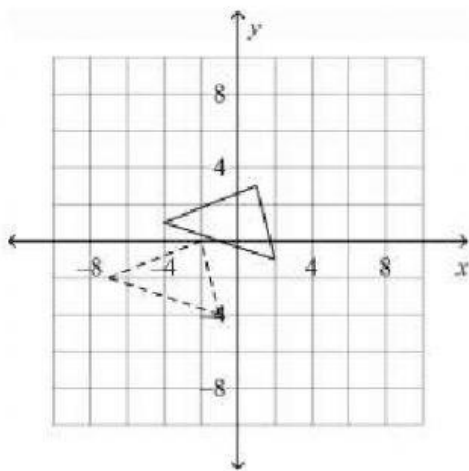
a.



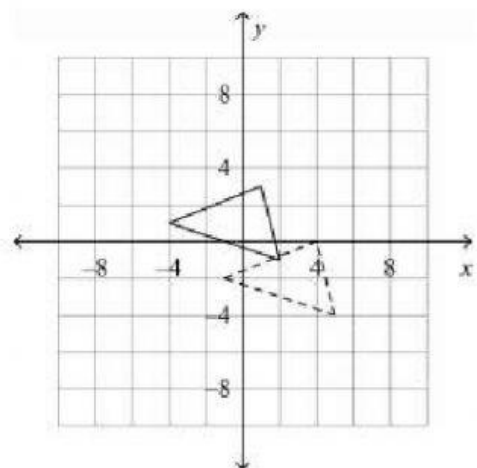
b.



c.



d.



3. The vertices of a triangle are $P(-4, -8)$, $Q(-6, 6)$, and $R(1, -7)$. Name the vertices of the image reflected in the **y-axis**.

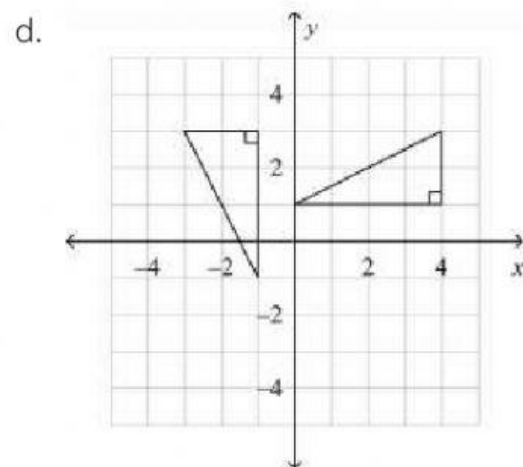
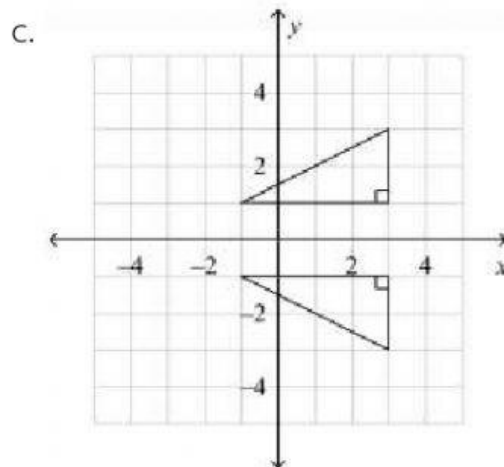
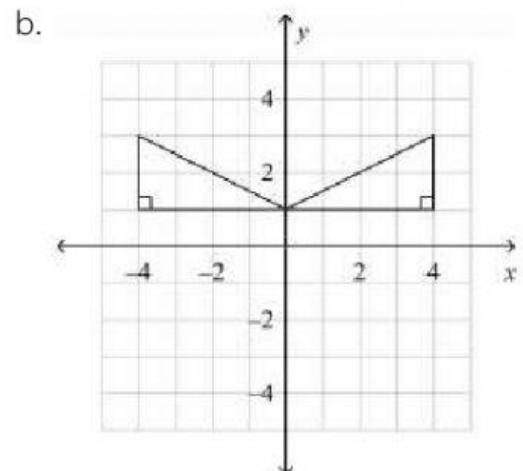
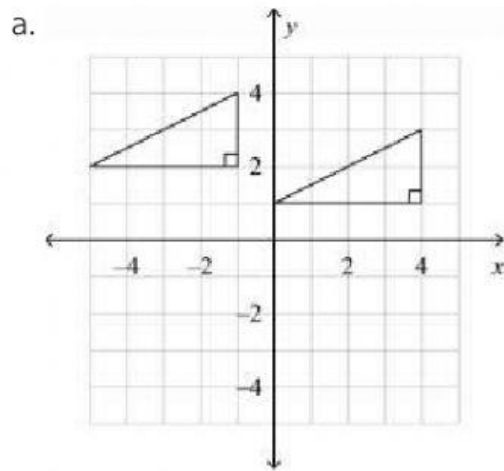
a. $P'(4, 8)$, $Q'(6, -6)$, $R'(-1, 7)$

b. $P'(-4, -8)$, $Q'(-6, 6)$, $R'(1, -7)$

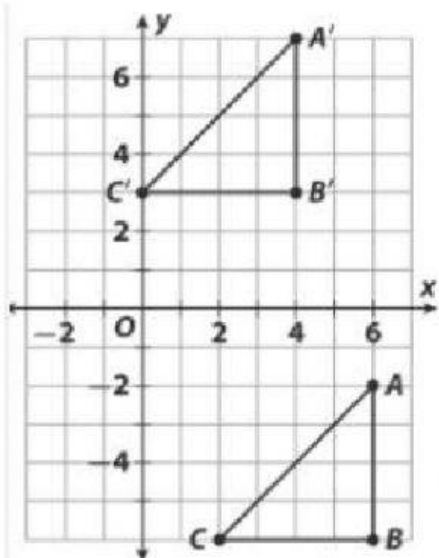
c. $P'(4, -8)$, $Q'(6, 6)$, $R'(-1, -7)$

d. $P'(-4, 8)$, $Q'(-6, -6)$, $R'(1, 7)$

4. Which graph shows a triangle and its **reflected image** in the **x-axis**?



5. Determine how to translate $\triangle ABC$ to $\triangle A'B'C'$?



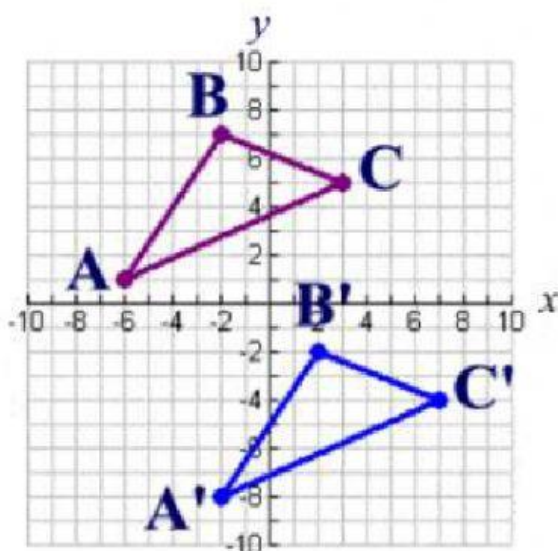
a. (2, -5)

b. (2, -9)

c. (-2, 9)

d. (-2, -9)

6. Which rule shows how $\triangle ABC$ is translated to $\triangle A'B'C'$?



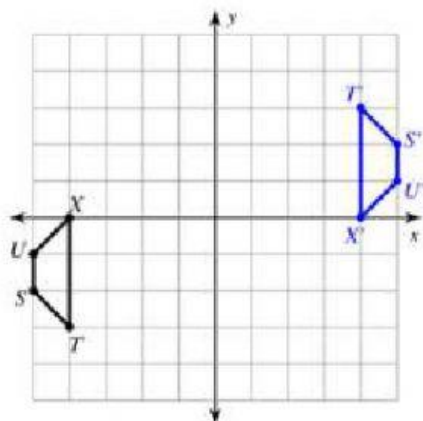
a. $(x, y) \rightarrow (x - 4, y + 9)$

b. $(x, y) \rightarrow (x + 4, y - 9)$

c. $(x, y) \rightarrow (x - 3, y + 8)$

d. $(x, y) \rightarrow (x + 3, y - 8)$

7. How many degrees the figure was rotated?



a. 90° , clockwise

b. 90° , counterclockwise

c. 180°

d. 270° , clockwise

8. Triangle ABC is labeled with points $A(5, 2)$, $B(1, 2)$ and $C(3, 6)$ on a coordinate plane. Find the coordinates of A' B' C' after a **reflection over the x-axis**.

a. $A'(5, -2)$, $B'(1, -2)$, $C'(3, -6)$

b. $A'(-5, -2)$, $B'(-1, -2)$, $C'(-3, -6)$

c. $A'(-5, -2)$, $B'(-2, -1)$, $C'(-6, -3)$

d. $A'(-5, 2)$, $B'(-1, 2)$, $C'(-3, 6)$

9. Going from (x, y) to $(-x, -y)$ will result in a counter-clockwise rotation of _____ degrees.

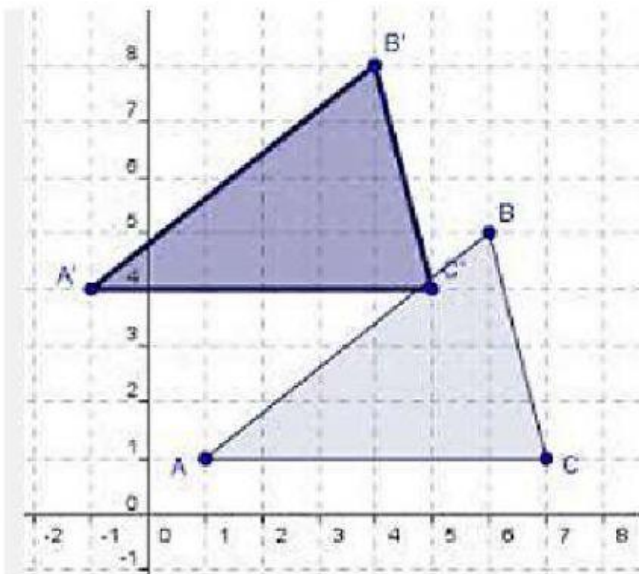
a. 90°

b. 180°

c. 45°

d. 270°

10. Which type of transformation is applied in the figure shown below?



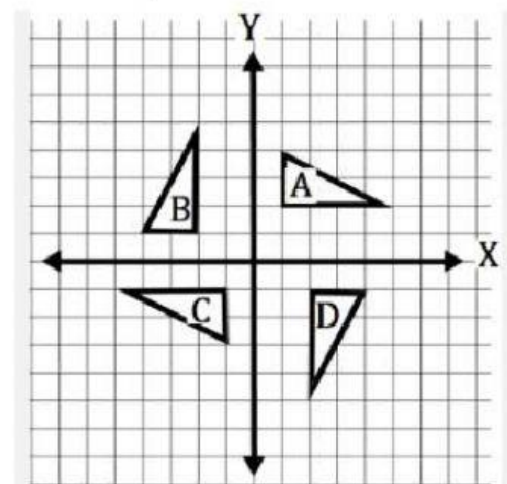
a. translation with a vector $(-3, 2)$

b. reflection along with the y - axis

c. rotation about the origin

d. translation with a vector $(2, -3)$

11. Identify the transformation from triangle A to triangle D.



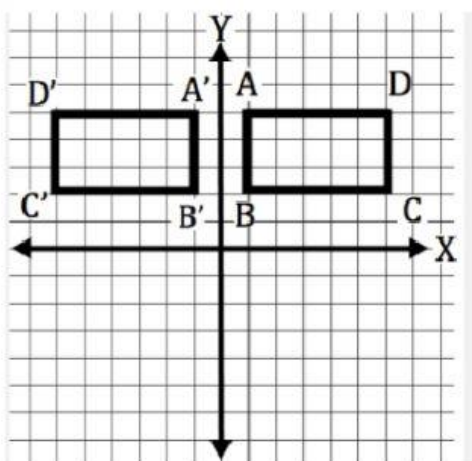
a. 90° , clockwise rotation

b. rotate , 180°

c. 270° , clockwise rotation

d. 90° , counterclockwise rotation

12. Identify the transformation of $ABCD$ to $A'B'C'D'$.

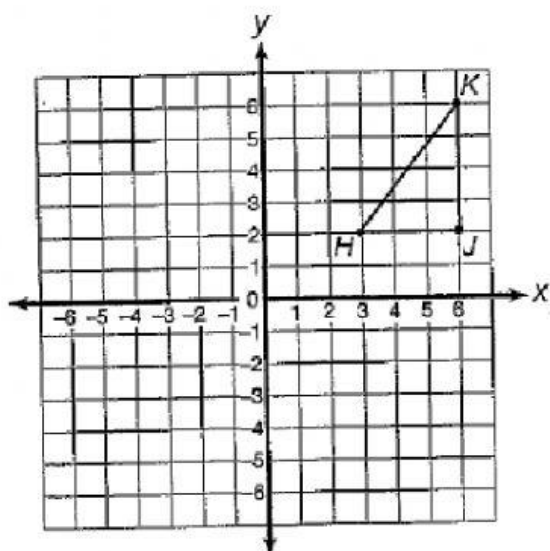


- a. translation, 2 units to the left
- b. reflection across the x – axis
- c. 90° , counter clockwise rotation
- d. reflection across the y – axis

13. Point A (2, 4) is rotated 180° about the origin, what are the coordinates of D'?

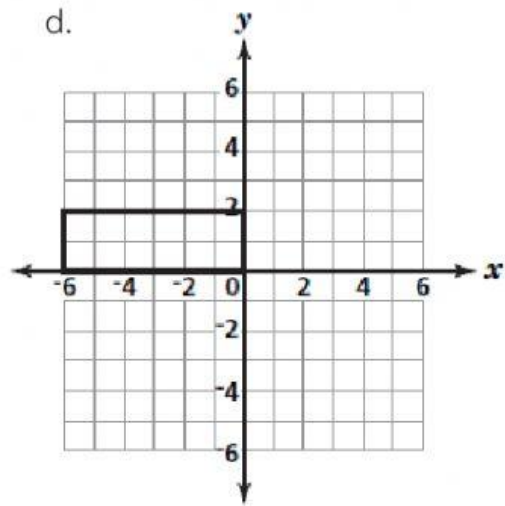
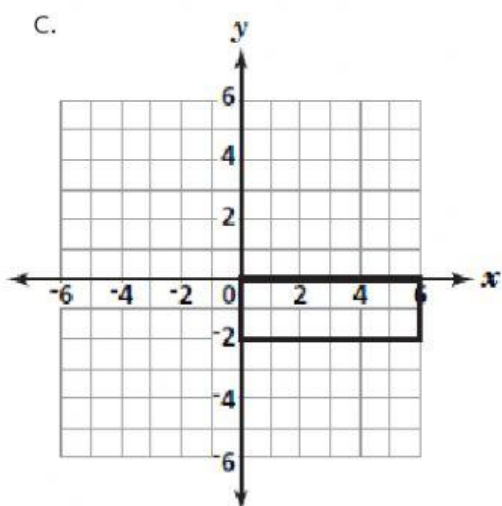
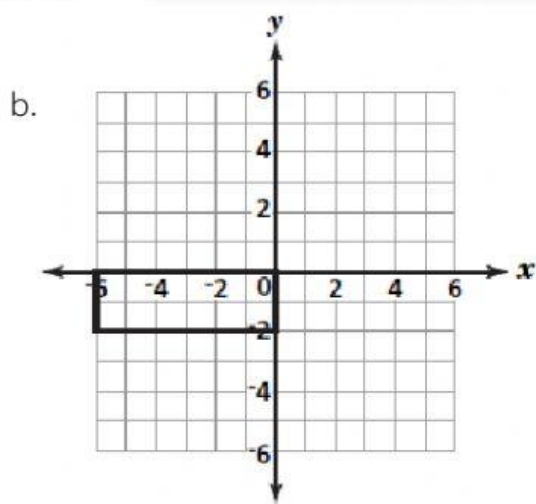
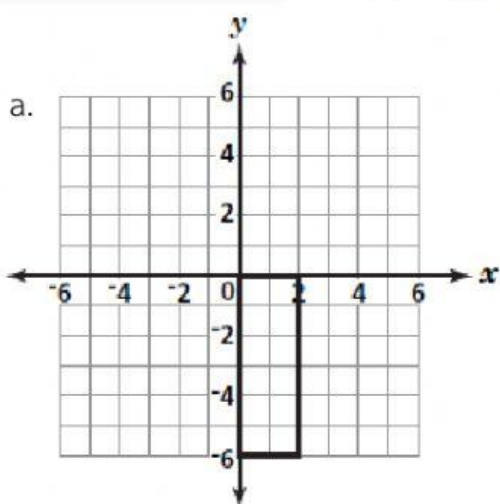
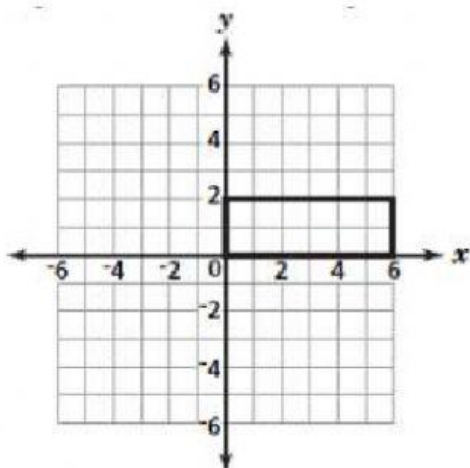
- a. (4, -2)
- b. (-4, 2)
- c. (-2, -4)
- d. -2, 4)

14. Given the figure below, If the triangle will be reflected along the y – axis and form $\Delta H'J'K'$, what are the coordinates of K' ?

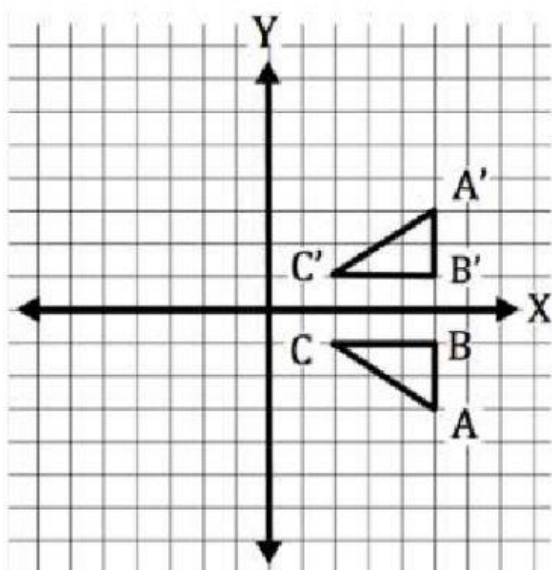


- a. (6, -6)
- b. (-6, 6)
- c. (6, 6)
- d. (-6, -6)

15. Which image shows a 90° , clockwise rotation of a rectangle below?

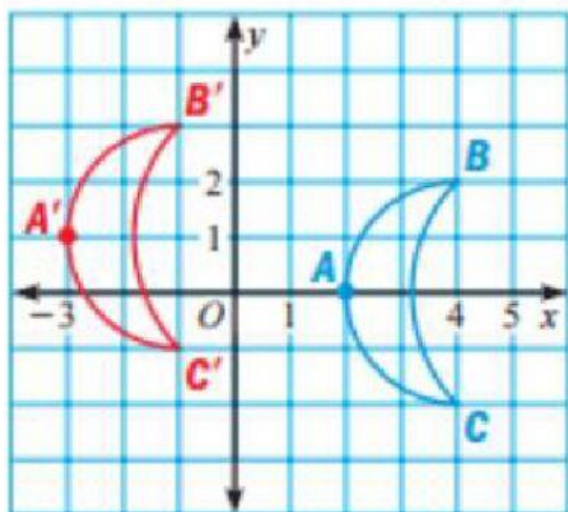


16. Identify the transformation from $\triangle ABC$ to $\triangle A'B'C'$.



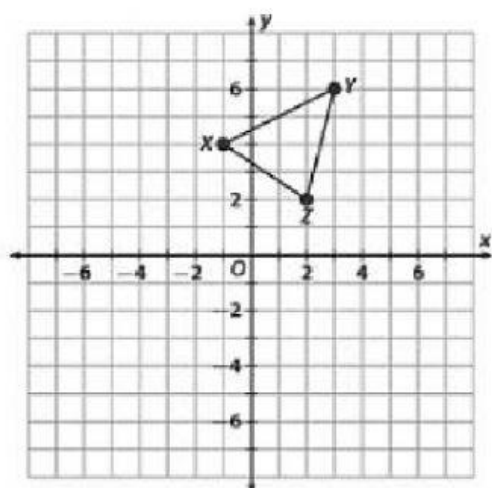
- a. 90° , clockwise rotation
- b. 90° , counterclockwise rotation
- c. reflection along x – axis
- d. reflection along y – axis

17. Identify the transformation.



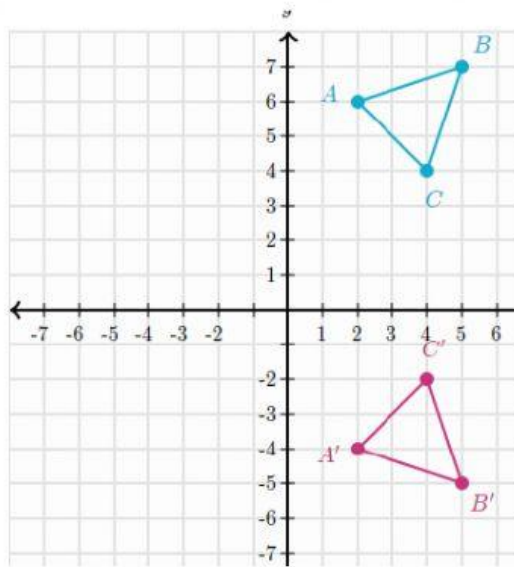
- a. reflection across y – axis
- b. 90° clockwise rotation
- c. translation , 5 units left and 1 unit down
- d. translate , 5 units right and 1 unit down

18. Determine the coordinates of X', after the triangle being translated 3 units to the left and 2 units down.



- a. (-4, 6)
- b. (-3, 1)
- c. (-4, 2)
- d. (-2, -4)

19. Determine the mirror line of the reflection shown in the figure below.



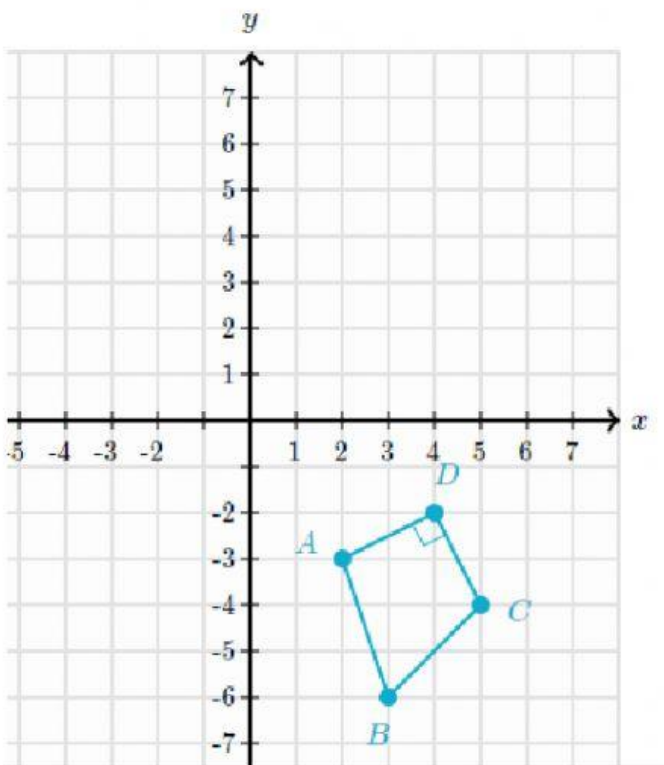
a. x - axis

b. $x = 4$

c. $y = 4$

d. $y = 1$

20. Given a quadrilateral below, what are the coordinates of A', after the shape is reflected along $y = -3$?



a. (2, -3)

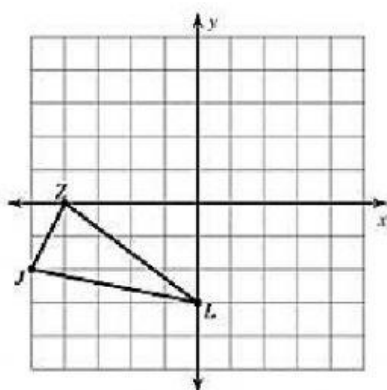
b. (-2, -3)

c. (-7, -3)

d. (-2, 3)

Part 2: Draw the graph of each transformation to your notebook and send a photo to teacher Amy's personal chat. Color the new image different from the pre- image.

1. rotate 90° clockwise about the origin

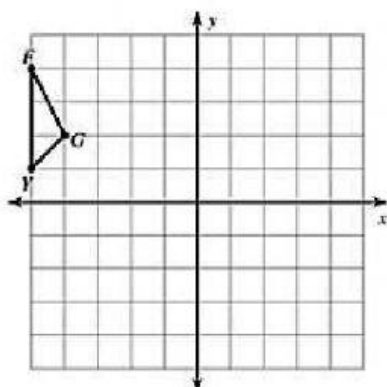


J' (,)

L' (,)

Z' (,)

2. translate 4 units to the right and 1 unit down

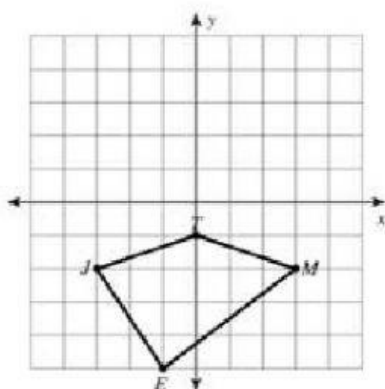


F' (,)

G' (,)

Y (,)

3. rotate 180° about the origin



J' (,)

T' (,)

M' (,)

E' (,)