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

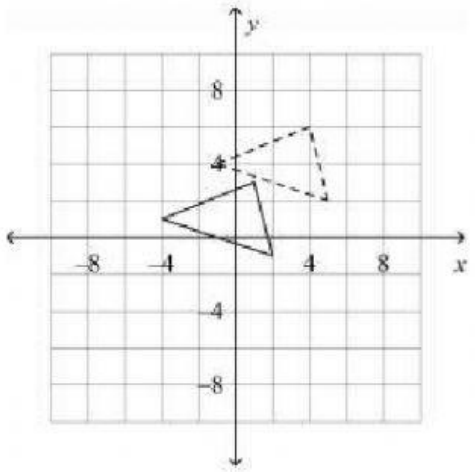
1. Which ordered pair is use to describe the translation that is:

1 units to the right and 5 units down?

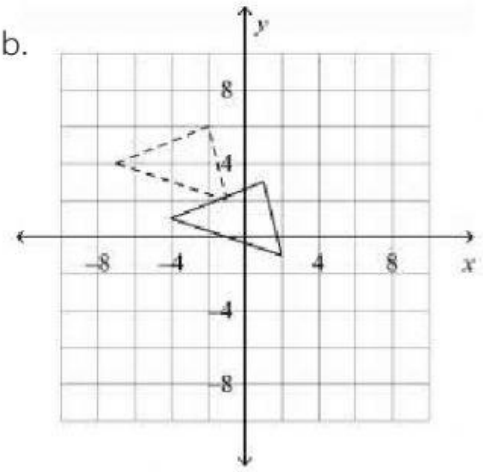
a. (- 1 , -5) b. (1, -5) c. (-1, 5) d. (1, 5)

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

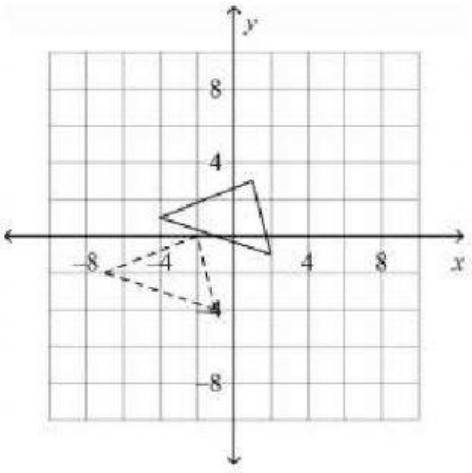
a.



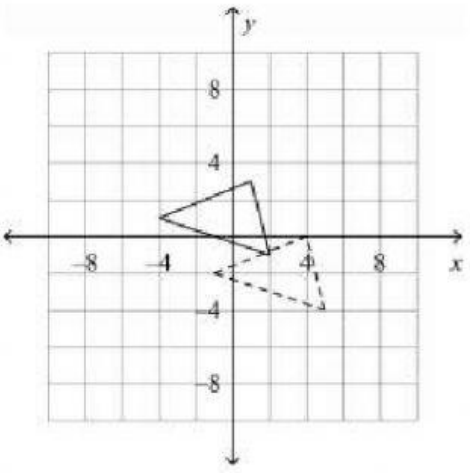
b.



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)

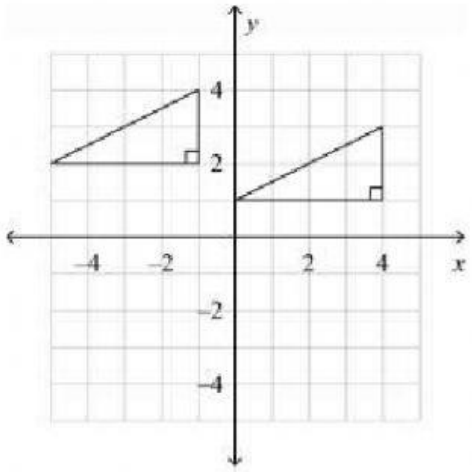
b. P'(-4, -8) , Q'(-6, 6), R'(1, -7)

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

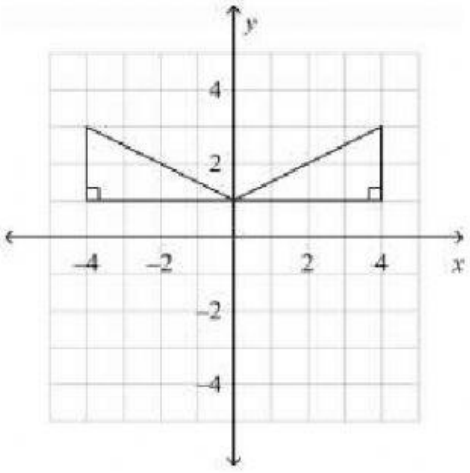
d. P'(-4, 8), Q'(-6, -6), R'(1, 7)

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

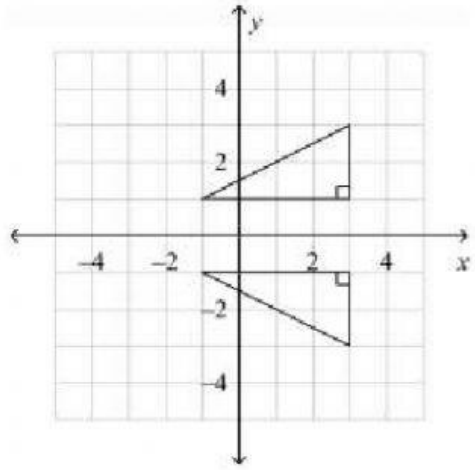
a.



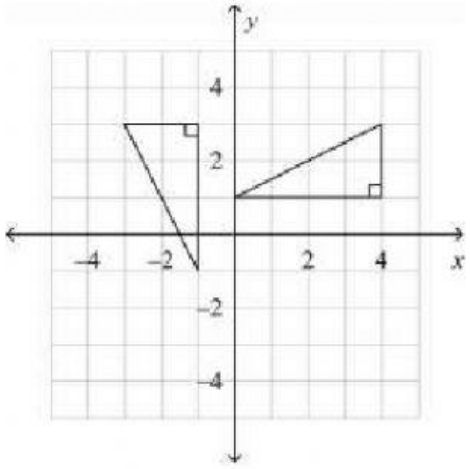
b.



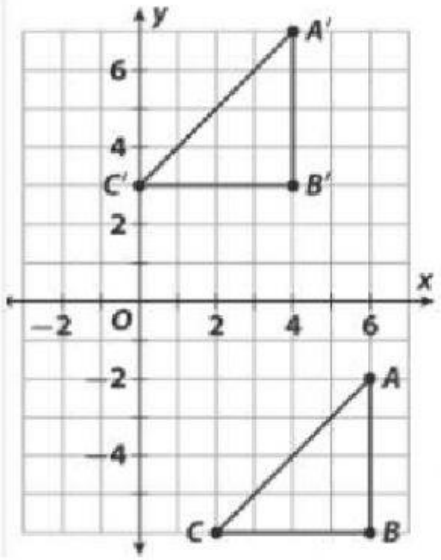
c.



d.



5. Determine how to translate ΔABC to $\Delta A'B'C'$?



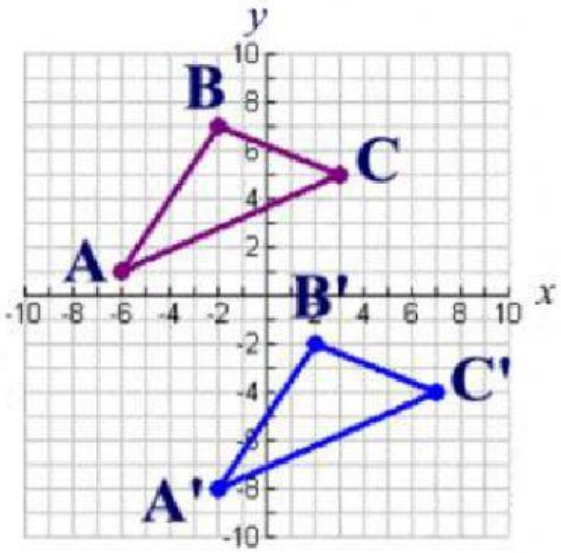
a. (2 , -5)

b. (2, -9)

c. (-2, 9)

d. (-2, -9)

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



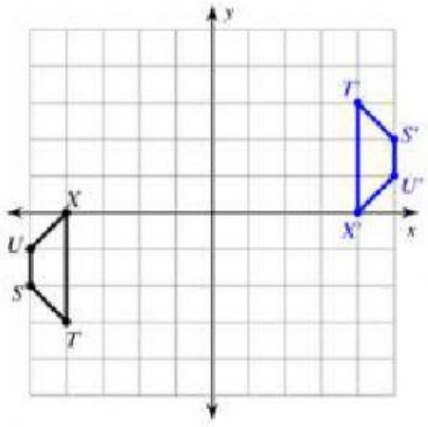
a. (x, y) --> (x - 4, y + 9)

b. (x, y) --> (x + 4, y - 9)

c. (x, y) --> (x - 3, y + 8)

d. (x, y) --> (x + 3, y - 8)

7. How many degrees the figure was rotated?



a. 90^0, clockwise

b. 90^0, counterclockwise

c. 180^0

d. 270^0 , 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.

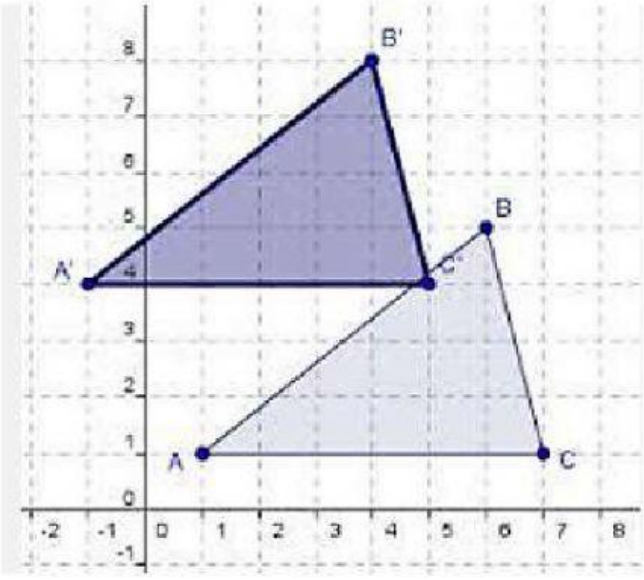
a. 90^0

b. 180^0

c. 45^0

d. 270^0

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



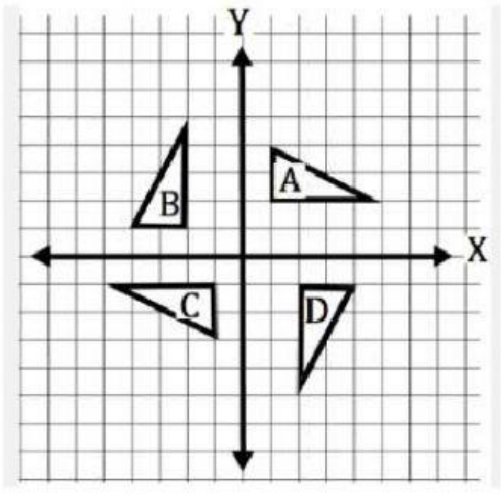
a. translation with a vector (-3, 2)

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.



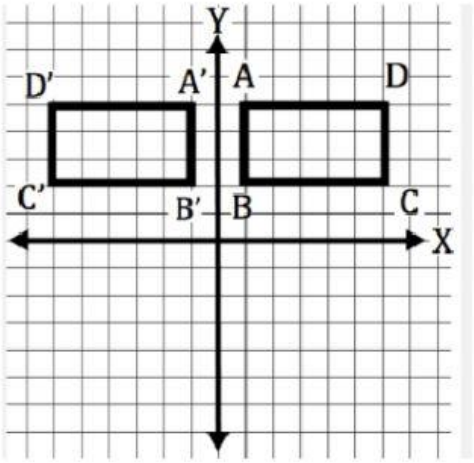
a. 90^0, clockwise rotation

b. rotate , 180^0

c. 270^0, clockwise rotation

d. 90^0 , 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

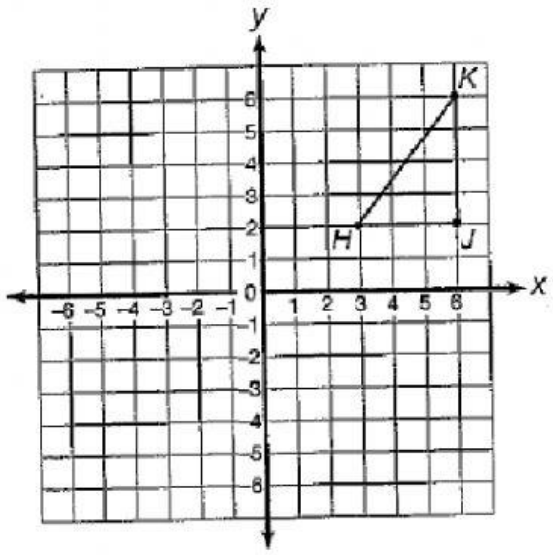
c. 90^0, counter clockwise rotation

d. reflection across the y – axis

13. Point A (2, 4) is rotated 180^0 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' ?



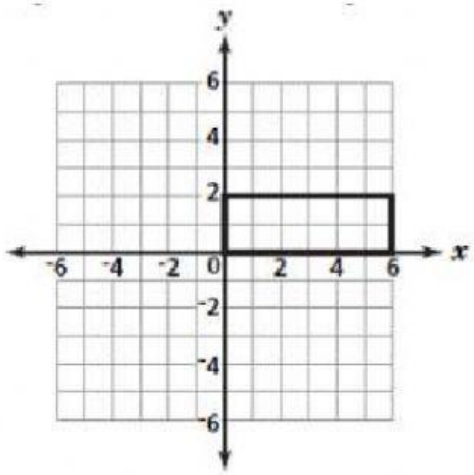
a. (6, -6)

b. (-6, 6)

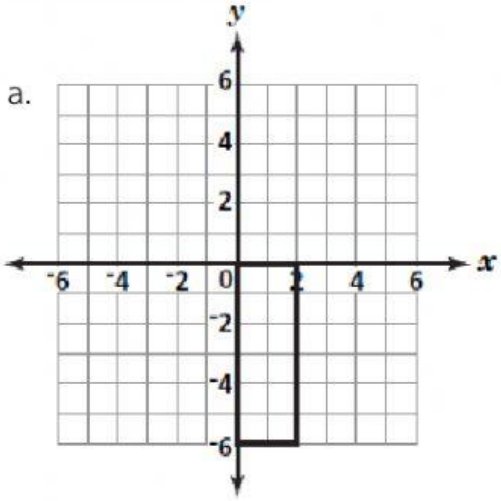
c. (6, 6)

d. (-6, -6)

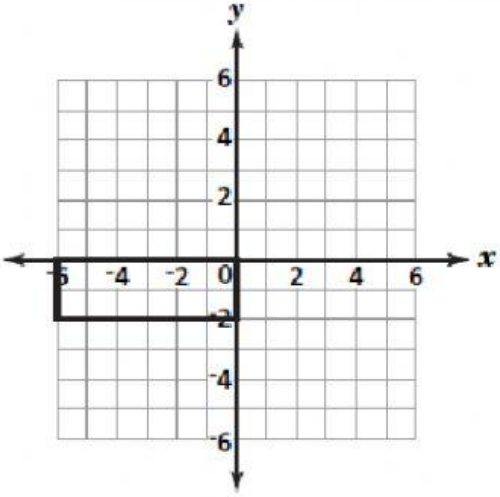
15. Which image shows a 90^0 , clockwise rotation of a rectangle below?



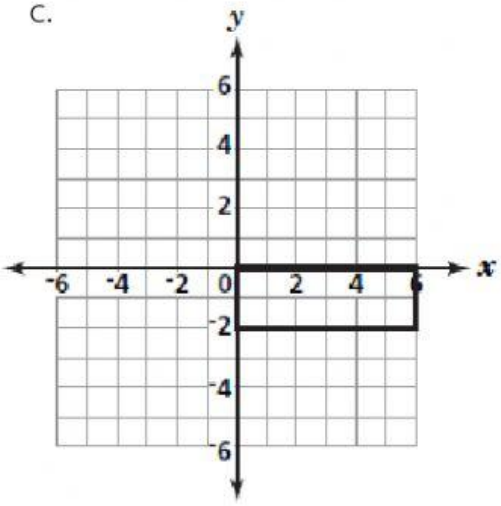
a.



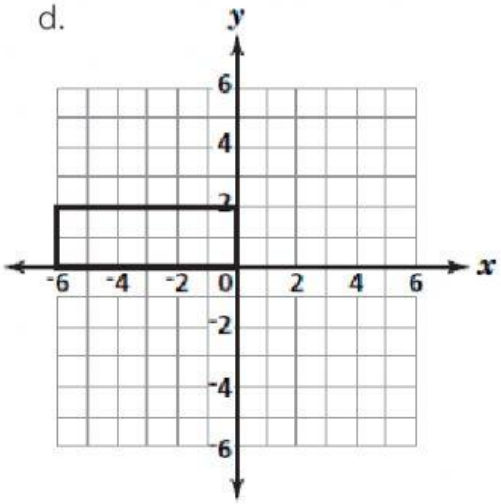
b.



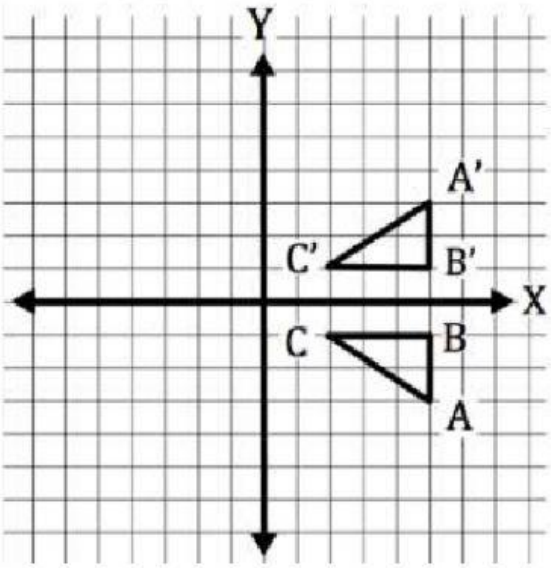
c.



d.



16. Identify the transformation from ΔABC to $\Delta A'B'C'$.



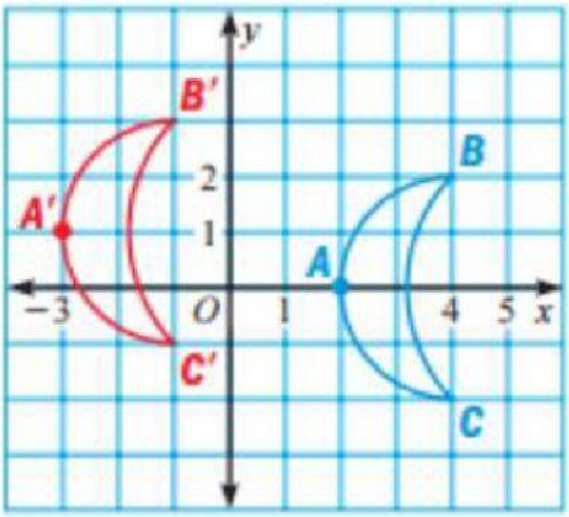
a. 90^0 , clockwise rotation

b. 90^0 , counterclockwise rotation

c reflection along x – axis

d. reflection along y – axis

17. Identify the transformation.



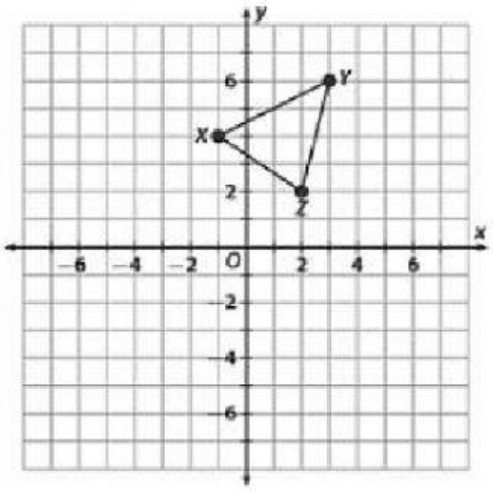
a. reflection across y – axis

b. 90^0 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.



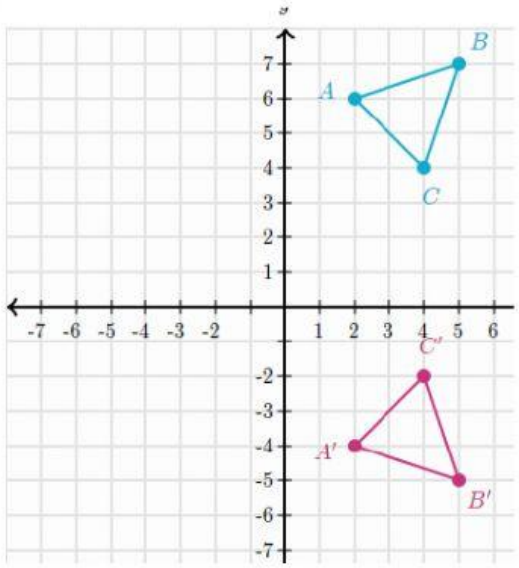
a. (-4, 6)

b. (-3, 1)

c. (-4, 2)

d. (-2, -4)

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



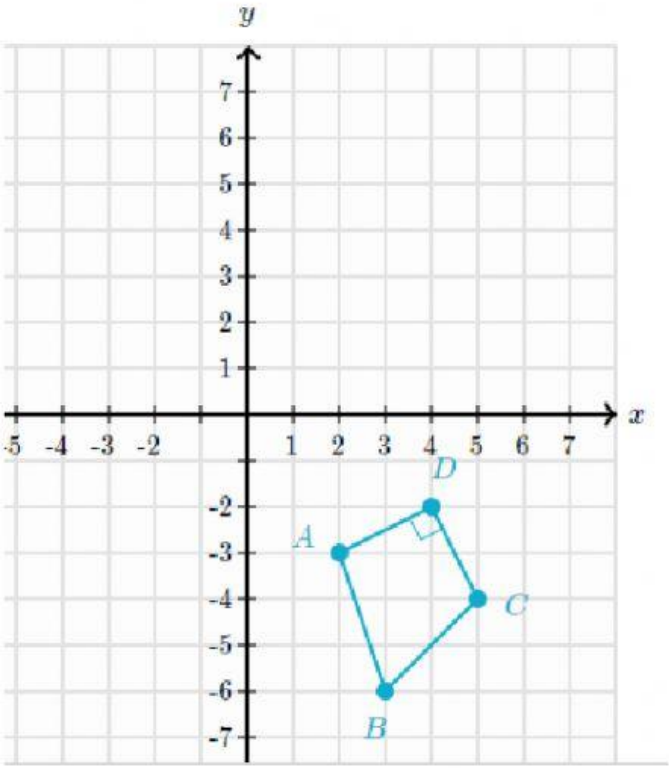
a. x – axis

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)

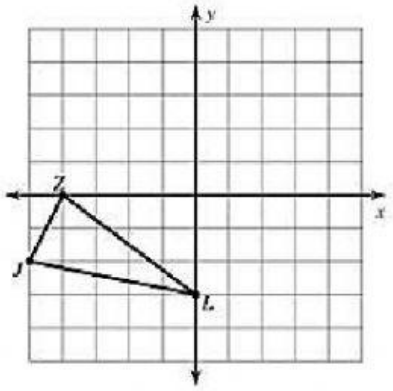
b. (-2, -3)

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 90^0 clockwise about the origin

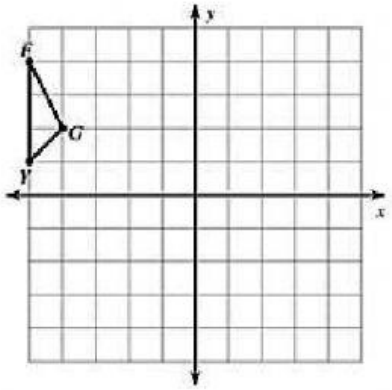


J' (____, ____)

L' (____, ____)

Z' (____, ____)

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

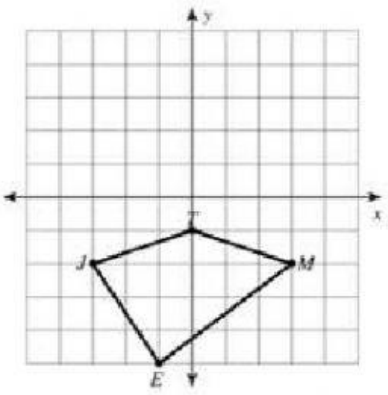


F' (____, ____)

G' (____, ____)

Y (____, ____)

3. rotate 180^0 about the origin



J'(____, ____)

T' (____, ____)

M' (____, ____)

E' (____, ____)