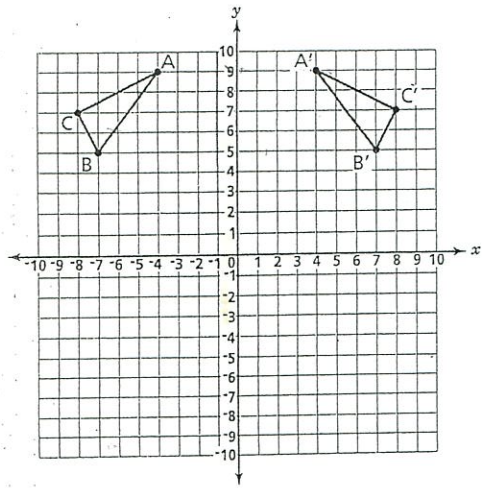
#79

Name: Key

# Reflections Homework

(1) Triangle ABC and triangle A'B'C' are plotted on the coordinate plane below.




What is the name of the transformation applied to triangle ABC that resulted in triangle A'B'C'?

***Answer*** Reflection

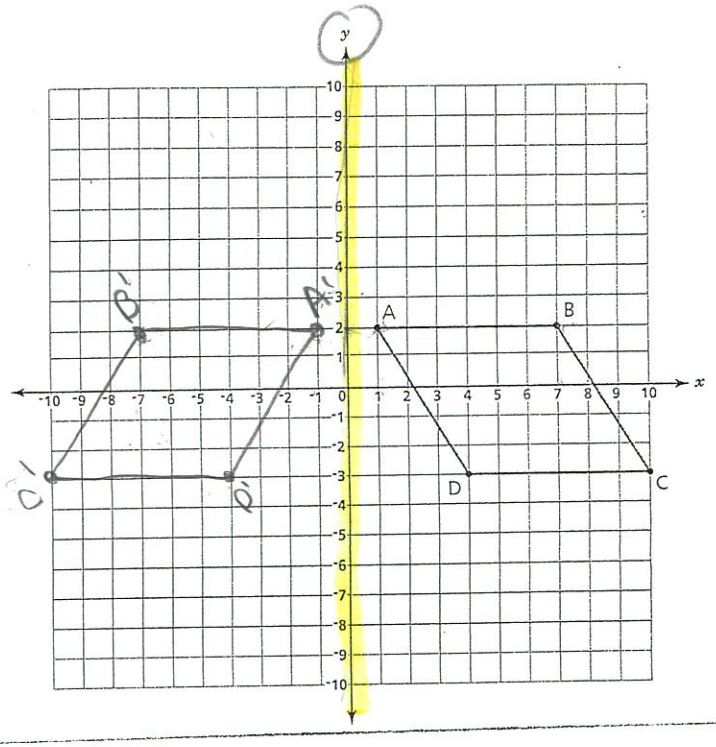
On the lines below, describe how the coordinates of point A changed to the coordinates of point A'.

The coordinates of A(-4, 9) changed to A'(4, 9). The x-coordinate changed its sign

~ or ~

point A is 4 units to the left of the y-axis so A' must be 4 units to the right of the y-axis

(2) Alexis started making a design by drawing figure ABCD. The next figure in her design is the reflection of figure ABCD in the y-axis. On the coordinate plane below, draw the reflection of figure ABCD. Label the image A'B'C'D'.




On the lines below, explain how you determined the location of B'.

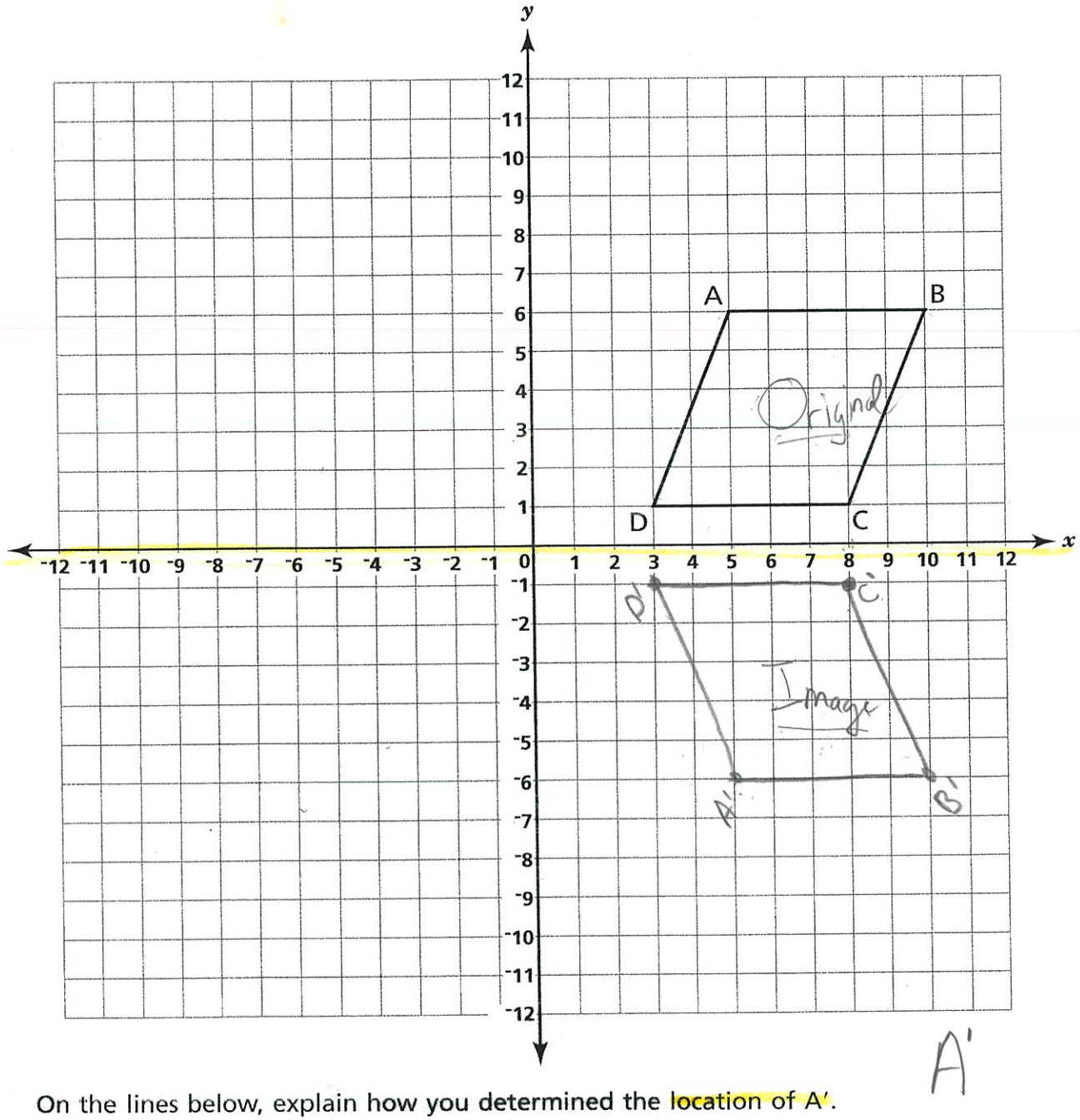
* B is 7 units to the right of y, so B' is 7 units to the left of y

~ OR ~

* Change B(7, 2) to B'(-7, 2) by changing the x-coordinates

OVER →

3 On the coordinate plane below, draw the image of quadrilateral ABCD reflected over the x-axis. Label the image A'B'C'D'.




On the lines below, explain how you determined the location of A'.

* I reflected A over the x-axis A(5, 6) became A'(5, -6). I changed the y-coordinate, (or) A was 6 units above the x-axis so A' is 6 units below the x-axis