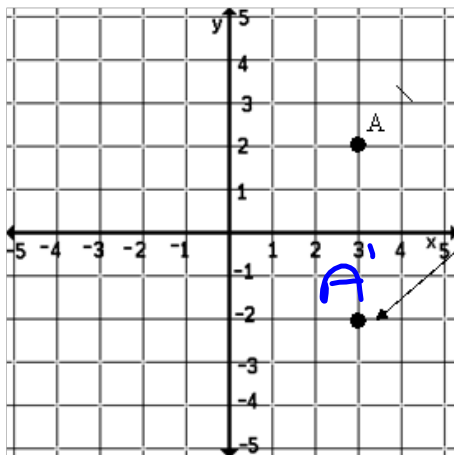


Guided Reflection Notes

Reflecting a point over the x- or y-axis "

$A' = A \text{ prime}$

Reflecting over the x-axis:



Write down the ordered pair for A.
If A is reflected across the x-axis, what would be the new point on the graph?
Label this point.

$A(3, 2)$ $A'(3, -2)$

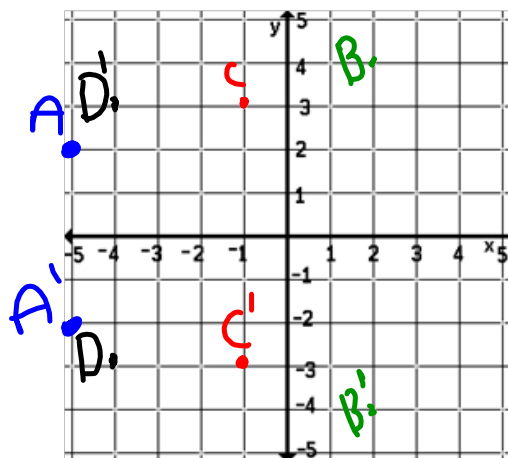
Look at both points, what observations can you make about the two points.

Reflecting over the x-axis rule: x-value stays the same
the signs of the y-value change to
the opposite.

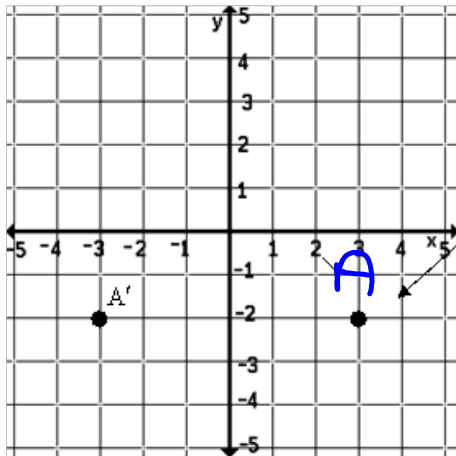
Try it:

Graph the following points in the correct quadrant of the coordinate plane. If the point is reflected across the x-axis, what are the coordinates of the reflected points? What similarities are between coordinates of the original point and reflected point?

- A (-5, 2) → $(-5, -2)$
- B (2, 4) → $(2, -4)$
- C (-1, 3) → $(-1, -3)$
- D (-4, -3) → $(-4, 3)$



Reflecting over the y-axis:



Write down the ordered pair for A.
 If A is reflected across the y-axis, what would be the new point on the graph?
 Label this point.

$A(3, -2)$ $A'(-3, -2)$

Look at both points, what observations can you make about the two points.

Reflecting over the y-axis rule: the y-value stays the same
the sign of the x-value changes to
the opposite.

Try it:

Graph the following points in the correct quadrant of the coordinate plane. If the point is reflected across the y-axis, what are the coordinates of the reflected points? What similarities are between coordinates of the original point and reflected point?

- A $(-5, 2)$ \longrightarrow $(5, 2)$
- B $(2, 4)$ \longrightarrow $(-2, 4)$
- C $(-1\frac{1}{2}, 3)$ \longrightarrow $(1\frac{1}{2}, 3)$
- D $(-4, -3\frac{1}{2})$ \longrightarrow $(4, -3\frac{1}{2})$

