

6th Grade Math

Lesson: Reflections and Coordinate Plane

Learning Target:

Students will locate and plot points reflected across one or both axes.

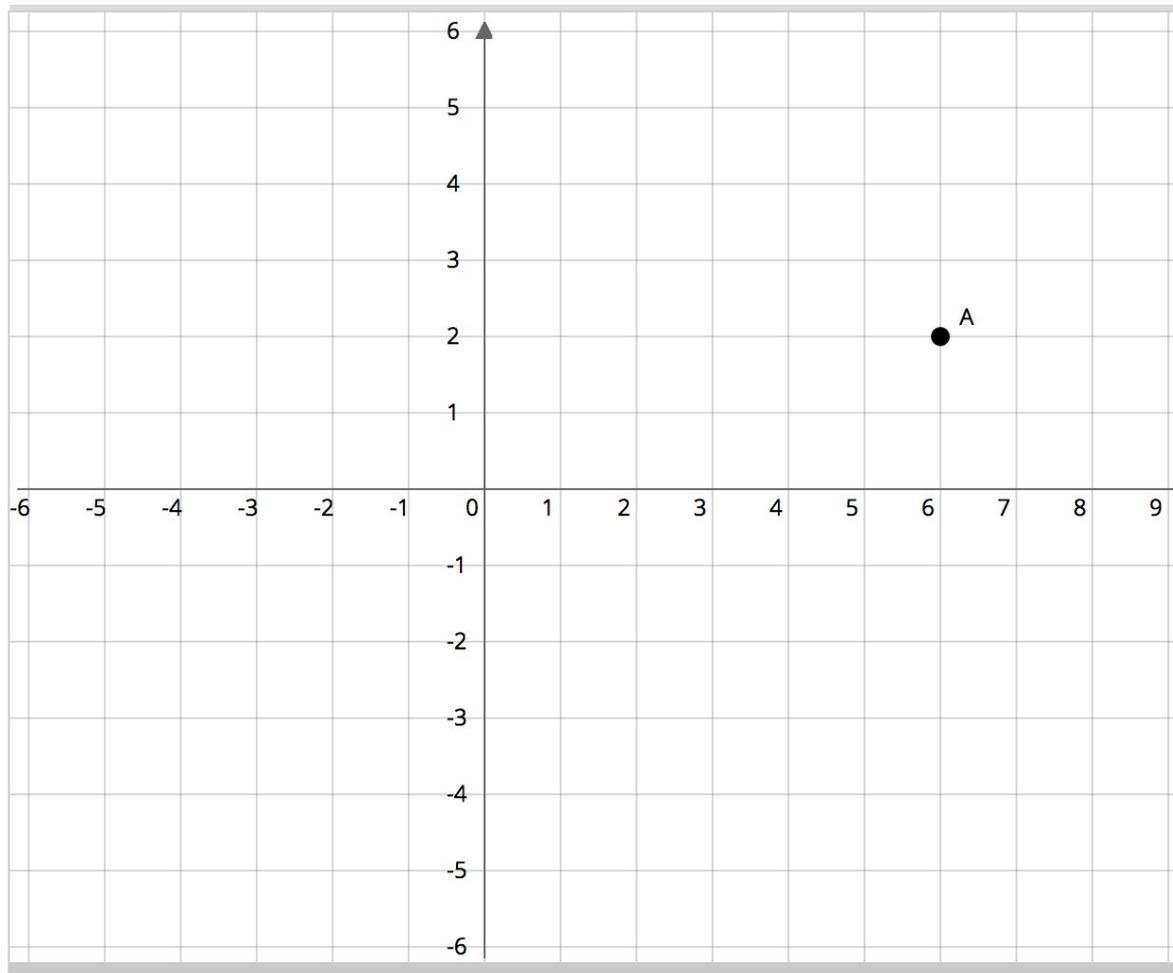
Let's Get Started:

Reflecting Points Khan Academy Video:

<https://bit.ly/2UPGSaf>

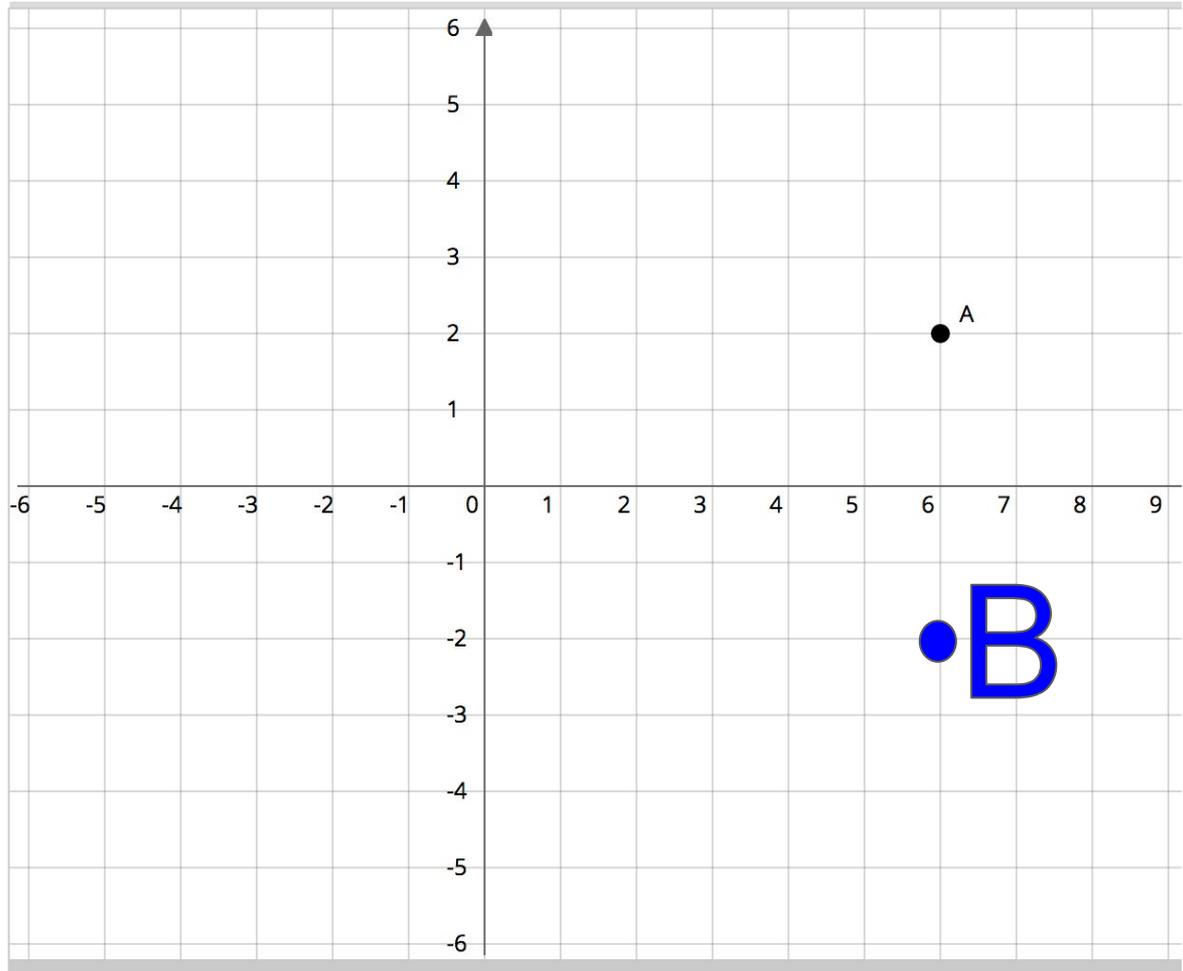
Practice:

Point B is a reflection of A across the x-axis. Point A is shown on the graph below. Plot point B.



Practice Answer:

Point B is a reflection of A across the x-axis. Point A is shown on the graph below. Plot point B.



Practice:

Khan Academy Practice:

<https://bit.ly/2QW8Wrn>

1. Look at the point.
2. Determine whether it's an x-axis reflection or y-axis reflection.
 - a. If it's an x-axis reflection, the y coordinate becomes its opposite: $(2,3) \rightarrow (2,-3)$
 - b. If it's a y-axis reflection, the x coordinate becomes its opposite: $(2,3) \rightarrow (-2,3)$
3. Click submit for feedback to see how you are doing.

Practice:

Plot these points on the next slide or on a piece of paper.

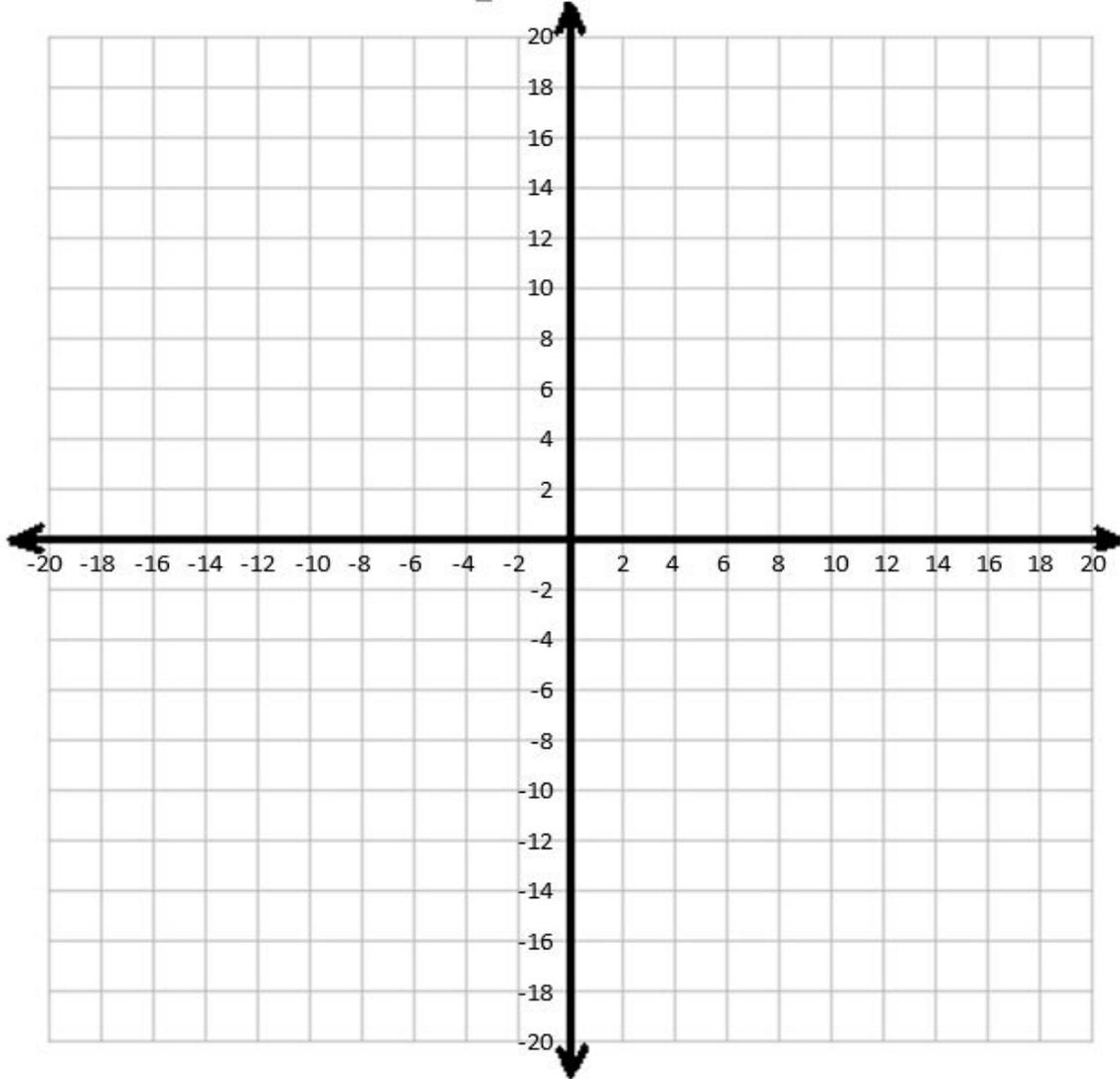
Points:

- Red: Reflection of $(-10, 4)$ about the x-axis
- Orange: Reflection of $(-2, -12)$ about the y-axis
- Yellow: Reflection of $(8, 5)$ about the x-axis
- Green: Reflection of $(12, -13)$ about the y-axis
- Blue: Reflection of $(0, 0)$ about the y-axis
- Purple: Reflection of $(0, -8)$ about the x-axis
- Pink: Reflection of $(-8, 0)$ about the y-axis

Practice:

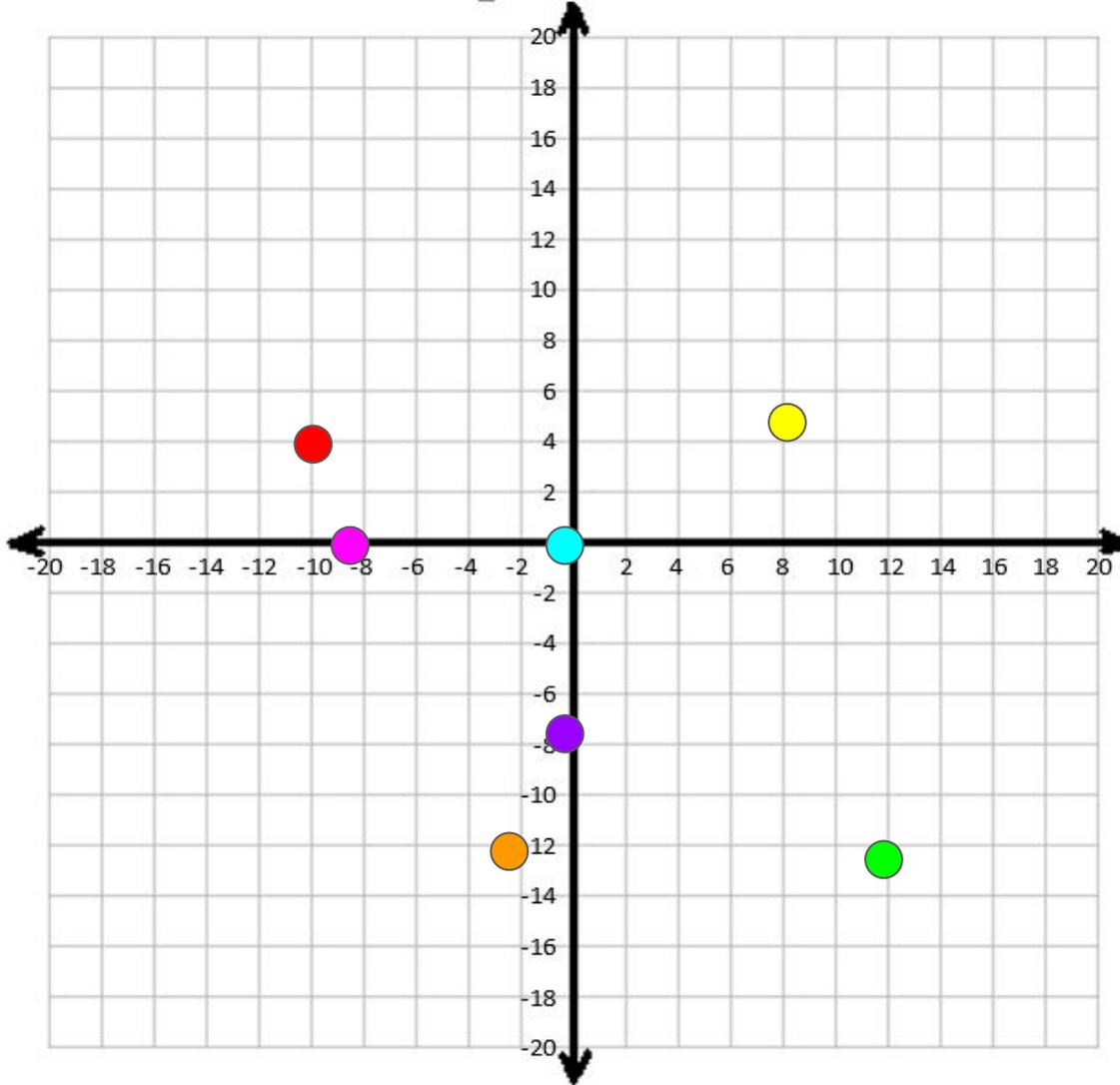
1. Follow directions on this slide to plot the correct points.
2. Write what the new coordinates for each point in the box below

| New Coordinates | |
|-----------------|--|
| Red: | |
| Orange: | |
| Yellow: | |
| Green: | |
| Blue: | |
| Purple: | |
| Pink: | |



Practice Answers:

1. Follow directions on this slide to plot the correct points.
2. Write what the new coordinates for each point in the box below



New Coordinates

Red: 10,-4
Orange: -2,12
Yellow: -8,5
Green: 12,13
Blue: 0,0
Purple: -0,-8
Pink: -8,-0

Additional Practice:

Click on the links below to get additional practice and to check your understanding!

Practice Worksheet:

[Reflecting Points](#)

Practice Website:

<https://www.ixl.com/math/geometry/reflections-find-the-coordinates>