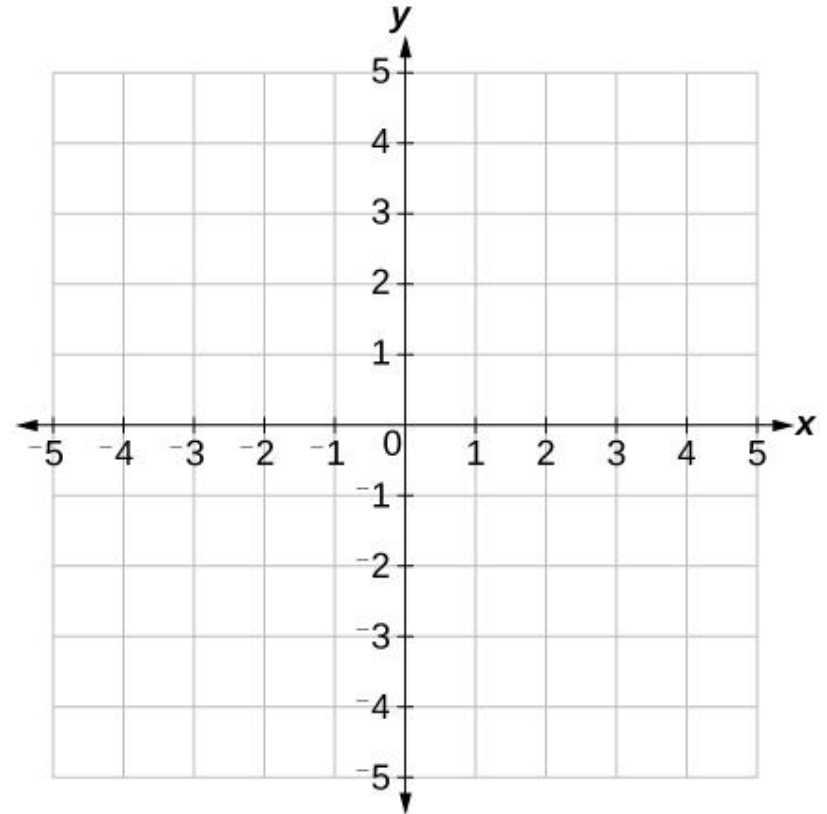# Math 6 - Unit 7: Rational Explorations
Reflecting Points on a Coordinate Plane

Find the ordered pair that is a reflection over the x-axis and then the y-axis of each of the points below.

(4,5)

(-2,2)

(3,-3)
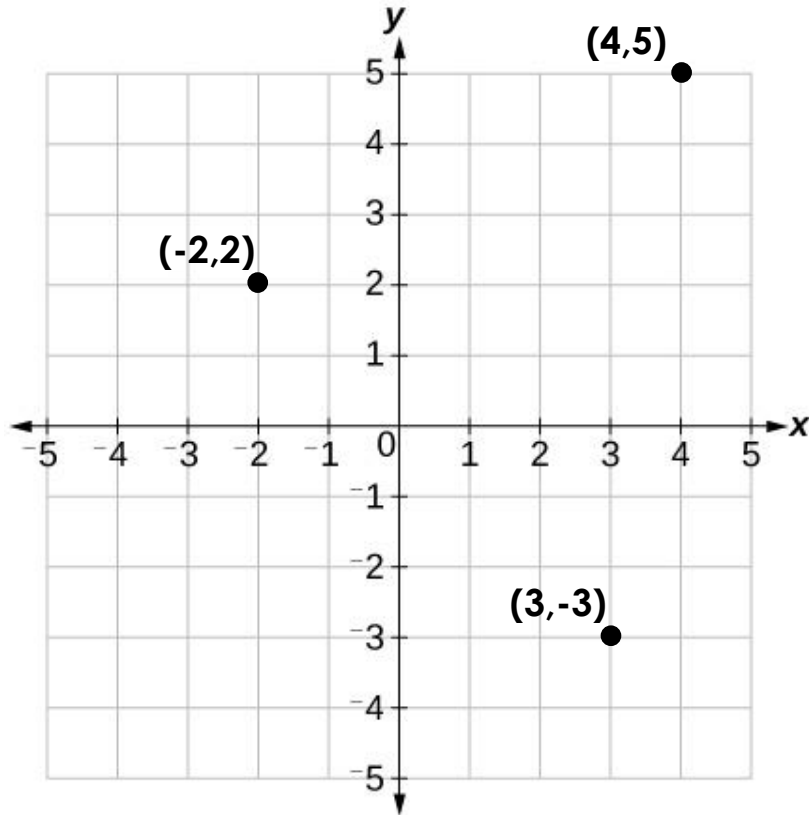
Graph each ordered pair and find a reflection over the x-axis and then the y-axis for each point.

Original Point	Reflected over x-axis	Reflected over y-axis
(-2,2)	(,)	(,)
(4,5)	(,)	(,)
(3,-3)	(,)	(,)

Original Point	Reflected over x-axis	Reflected over y-axis
S (-5 , 4)	(,)	(,)
U (-2 , -1)	(,)	(,)
M (4 , 3)	(,)	(,)

Extra Practice

For #'s 1-4, write an integer for each situation:

1) withdraw $20   2) a gain of 3 days vacation

3) 27 feet below sea level

4) 10 units to the right on a number line

5) Graph the set {–2, 2, 0, -1, 6, -4} on the number line.

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←—+—+—+—+—+—+—+—+—+—+—+—+—+—+—→
 −7−6−5−4−3−2−1 0 1 2 3 4 5 6 7
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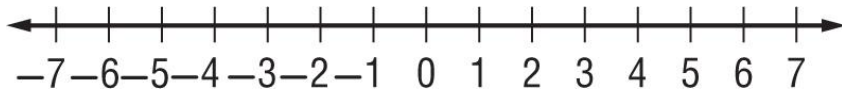
6) The opposite of **-23** is: 7) The opposite of **-16** is:

8) The opposite of **150** is: 9) The opposite of **56** is:

Find the absolute value for each of the problems below.

10) |8| 11) |-91| 12) -|100|

13) |-13| 14) |729| 15) -|-2|

Use the symbols <, >, = *to compare the following numbers.*

16) 15 _____ 12   17) |-32| _____ |37|
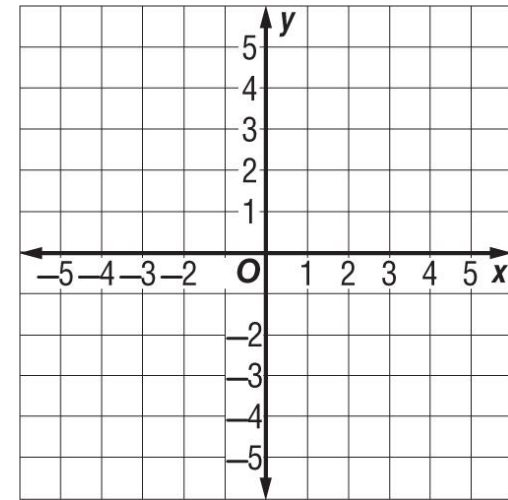
18) 68 _____ -79   19) |-47| _____ 47

Put the numbers in order from LEAST to GREATEST.

20) -23, 58, 9, -38, 0

21) -71, -56, 2, 92, -7

Missing Points

Graph the given coordinates below to find the missing ordered pair to finish the rectangle.

(-2, 2), (-2, 5), (-5, 2) (,   )

1) What is the missing point? _____

2) What is the perimeter of the rectangle? _____

3) What is the area of the rectangle? _____

Bonus

Use the rectangle above and the coordinate plane to find the reflection of the rectangle across the x and y axis.

Reflection over the x-axis:

A' (,   )   B' (,   )   C' (,   )   D' (,   )

Reflection over the y-axis:

A' (,   )   B' (,   )   C' (,   )   D' (,   )