Math 6 - Unit 7: Rational Explorations
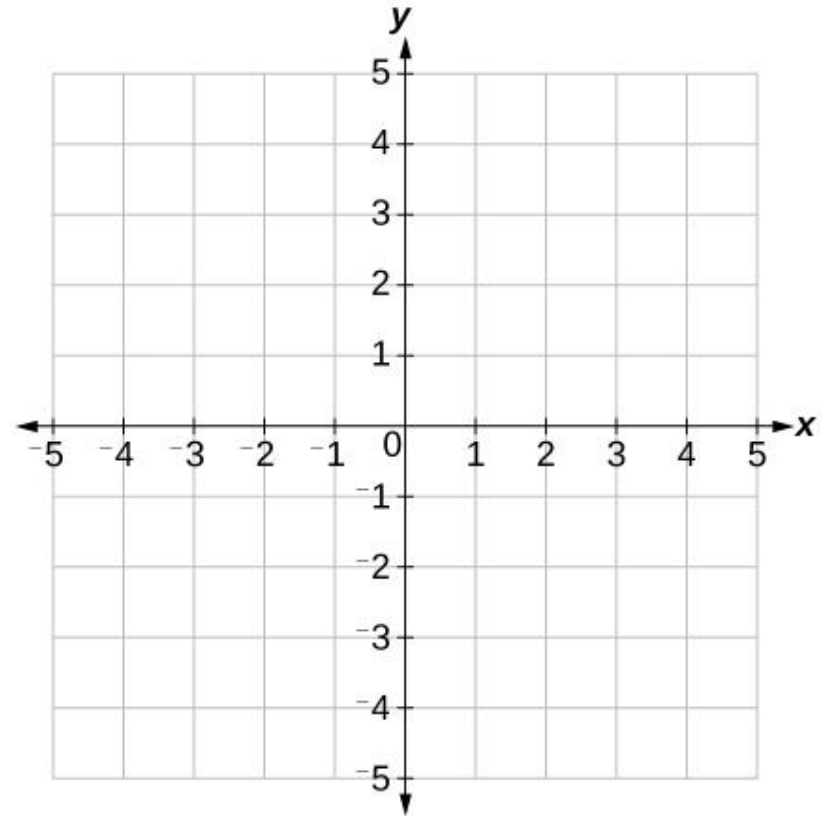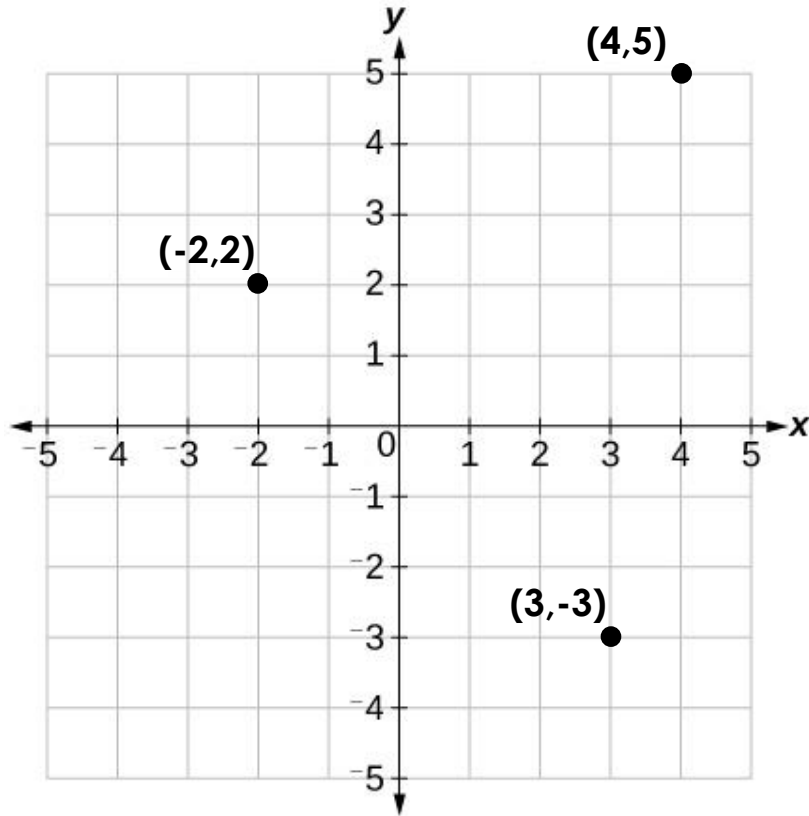*Reflection and Review*

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

Graph each ordered pair and find a reflection over the x-axis and then the y-axis for each point.
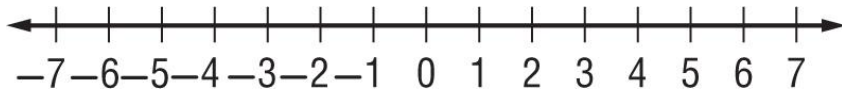
Original Point	Reflected over x-axis	Reflected over y-axis
A (-2,2)	A' (,)	A'' (,)
B (4,5)	B' (,)	B'' (,)
C (3,-3)	C' (,)	C'' (,)

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

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.

$$-7-6-5-4-3-2-1 \quad 0 \quad 1 \quad 2 \quad 3 \quad 4 \quad 5 \quad 6 \quad 7$$

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) $|-32|$ _____ $|37|$
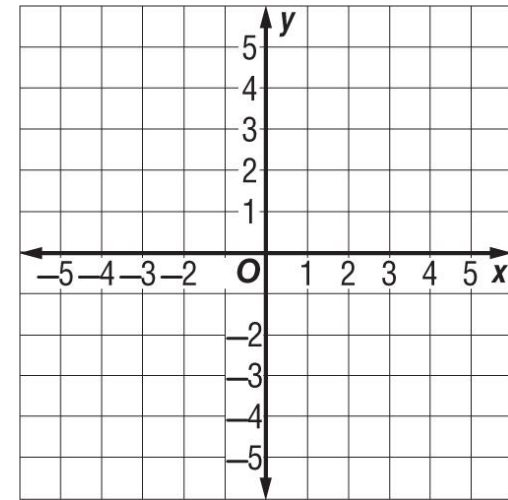
18) 68 _____ -79   19) $|-47|$ _____ 47

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.

A(-2, 2), **B**(-2, 5), **C**(-5, 2) **D**(,   )

1) What is the missing point? _____

2) What is the perimeter of the rectangle? _____

3) What is the area of the rectangle? _____

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"** (,)
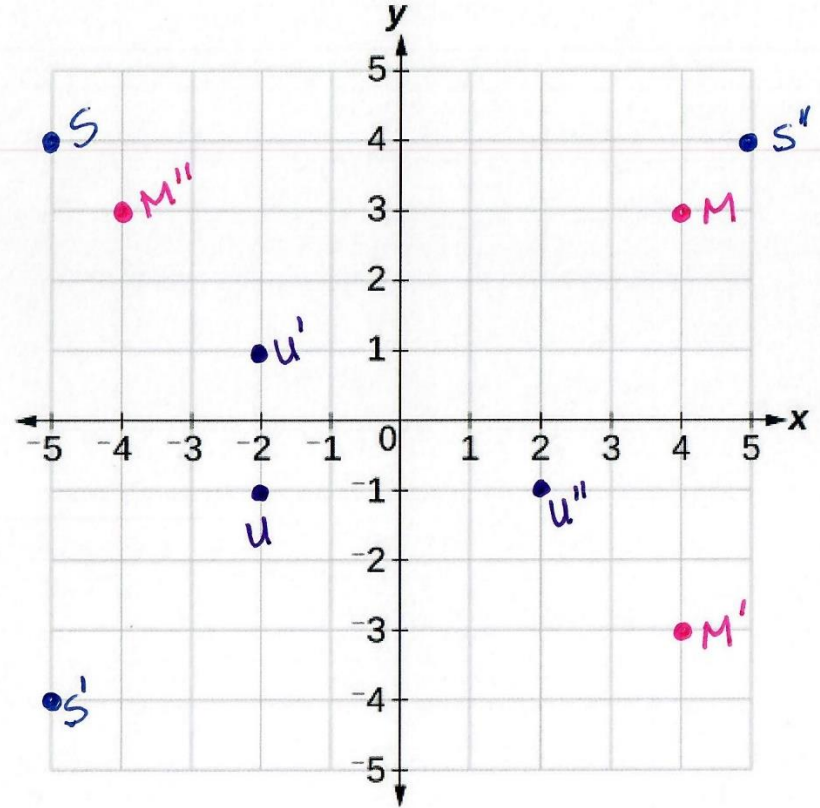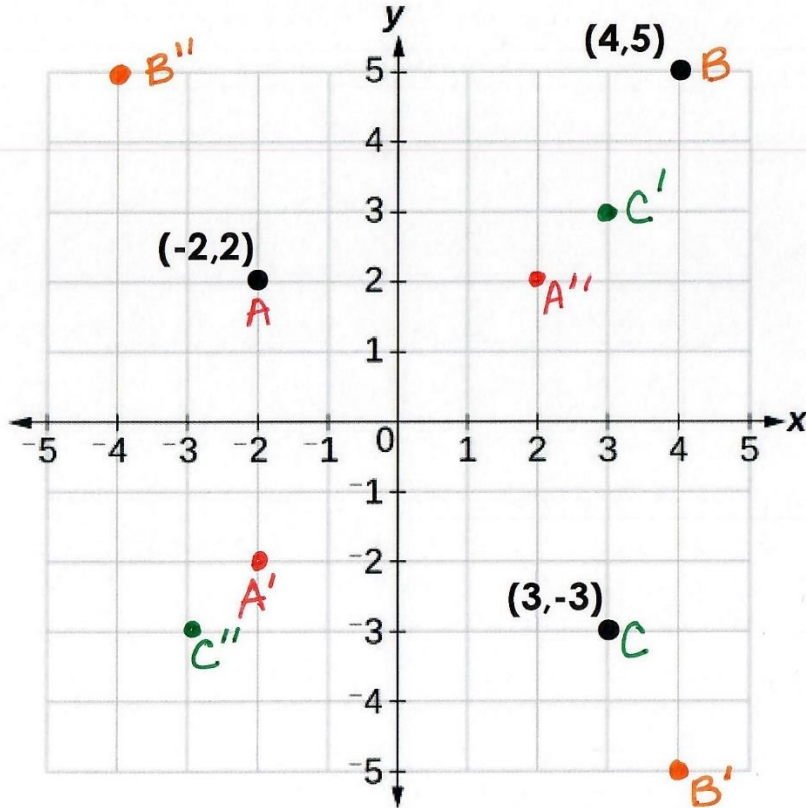
Name: _____

Class Period: 1 2 3 4 Date: _____

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

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
A (-2,2)	A' (-2,-2)	A" (2,2)
B (4,5)	B' (4,-5)	B" (-4,5)
C (3,-3)	C' (3,3)	C" (-3,3)

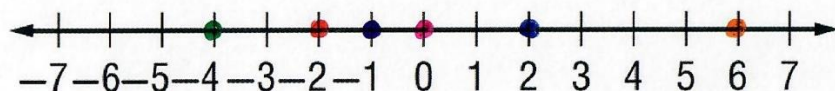| Original Point	Reflected over x-axis	Reflected over y-axis
S (-5 , 4)	S' (-5,-4)	S" (5,4)
U (-2 , -1)	U' (-2,1)	U" (2,-1)
M (4 , 3)	M' (4,-3)	M" (-4,3)

Extra Practice

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

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

3) 27 feet below sea level   **− 27**

4) 10 units to the right on a number line   **10**

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

$$-7\ -6\ -5\ -4\ -3\ -2\ -1\ \ 0\ \ 1\ \ 2\ \ 3\ \ 4\ \ 5\ \ 6\ \ 7$$

6) The opposite of **-23** is: **23**   7) The opposite of **-16** is: **16**

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

Find the absolute value for each of the problems below.

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

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

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

16) 15 **>** 12   17) |-32| **<** |37|

18) 68 **>** -79   19) |-47| **=** 47

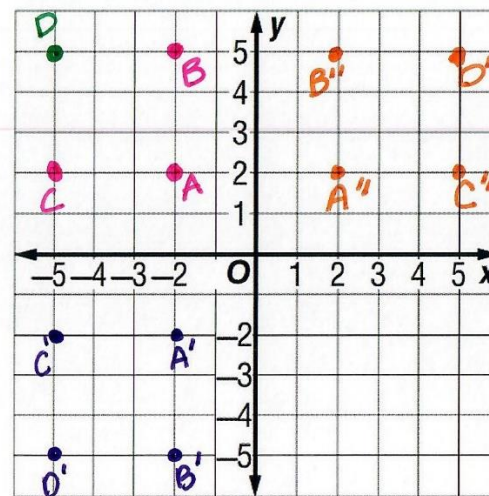**Put the numbers in order from LEAST to GREATEST.**

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

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

Missing Points

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

A   B   C   D
(-2, 2), (-2, 5), (-5, 2) (**-5 , 5**)

1) What is the missing point? **(−5,5)**

2) What is the perimeter of the rectangle? **12 units**

3) What is the area of the rectangle? **9 units²**

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' (**-2 ,-2**)   **B'** (**-2 ,-5**)   **C'** (**-5,-2**)   **D'** (**-5,-5**)

Reflection over the y-axis:

A" (**2 ,2**)   **B"** (**2 ,5**)   **C"** (**5 ,2**)   **D"** (**5 ,5**)