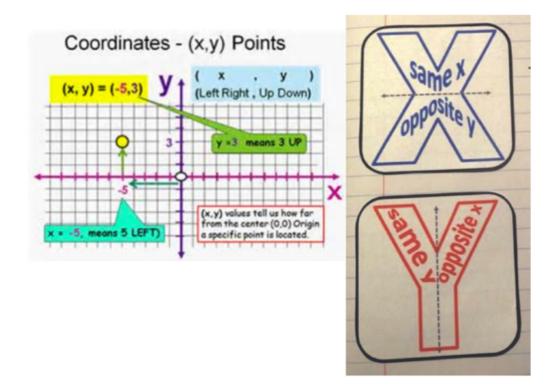


graphing on a Coordinate Plane

To graph an ordered pair, draw a <u>dot</u> at the point that corresponds to the <u>Coordinate</u>

Remember that for points reflected across the x-axis: x-coordinate is the $\frac{\text{same}}{\text{y}}$ -coordinate is the $\frac{\text{Opposite}}{\text{posite}}$

For points reflected across the y-axis: x-coordinate is the Opposite y-coordinate is the __same__.



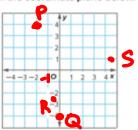
Graph and label each point on the coordinate plane below.



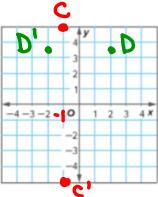
b. Q(0, -4)

c.
$$R\left(-\frac{1}{2}, -2\frac{1}{2}\right)$$

d. S(4.5, 1)



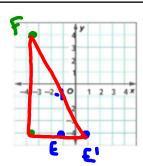
- e. Graph C(-1, 5). Then graph its reflection across the x-axis.
- **f.** Graph $D(2, 3\frac{1}{2})$. Then graph its reflection across the y-axis.



Use a coordinate plane to represent Jasmine's stone garden. Graph points

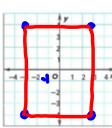
$$E(-1, -4)$$
 and $F(-3\frac{1}{2}, 4)$.

Then reflect point *E* across the *y*-axis and point *F* across the *x*-axis. What is the shape of her stone garden? (Examples 1–5)



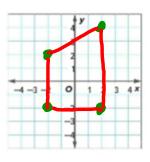
triangle

g. Ms. Shaull is drawing a map of the school. Her room is at (-3, 4) and the gym is at (3, 4). The library is a reflection of (3, 4) across the x-axis. This point is reflected across the y-axis to graph the office. What figure is graphed on the map?



rectangle

Mr. Martin is using a coordinate plane to design a logo. He graphs points at (2, 4) and (2, -2). He reflects (2, -2) across the y-axis. Then he reflects the new point across the x-axis. What figure is Mr. Martin using for his logo?



trapezoid

More examples/notes:

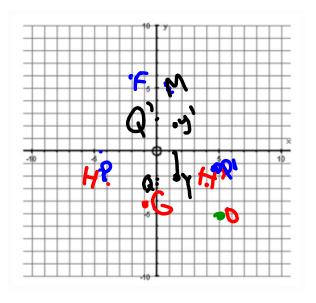
Lesson 7 Skills Practice
Graph on the Coordinate Plane

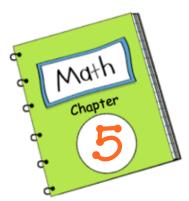
674	Name _		
BI-CLASS	Unit	Lesson	Due Date

Graph and label each point on the coordinate plane at the right.

2.
$$F(-2, 5)$$

- 5. Graph Y(1.5, -2) on the coordinate grid to the right. Then graph its reflection across the x-axis.
- Graph H(-4, -2.5) on the coordinate grid to the right.
 Then graph its reflection across the y-axis.
- Graph P(-4.5, -1.5) on the coordinate grid to the right.
 Then graph its reflection across the y-axis.
- 8. Graph Q(0,-2.5) on the coordinate grid to the right. Then graph its reflection across the x-axis.





TTTLE:

Integers and the Goordinate Plane

Date	Lesson	Topic/Assignment		
10/19	1	Integers and Graphing VN and Examples		
10/20	I	HW WS		
10/22	2	Absolute Value Video Notes		
10/22	2	Packet		
10/23	1-2	Alien WS		
10/26	3	Compare and Order Integers Notes		
10/26	3	Page 367 and 369 from Text		
10/27	3 4	Skills Practice WS		
10/28	4	Terminating and Repeating Decimals VN		
10/29	4	Practice WS (6 Boxes)		
10/30	4	Reteach and Review WS		
11/2	5	Compare and Order Rational Numbers VN		
11/3	5	Skills Practice WS		
11/4	5	Practice WS (6 Boxes)		
11/4	6	Goordinate Plane Video Notes		
11/4	6	In-Class Notes (half sheet)		
11/5	6	Page 401 from Text		
11/6	7	Graphing in Coordinate Plane VN		
11/6	7	In-Glass Notes (half sheet)		
11/6	7	Page 407 from Text		



Independent Practice

pg407

Go online for Step-by-Step Solutions

-4 -3 -2



Graph and label each point on the coordinate plane to the right.

(Examples 1 and 2)

T(0, 0)

2. D(2, 1)

K(−3.25, 3)

4. $N(0, -1\frac{1}{2})$

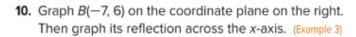
 $\mathbf{1}\mathbf{5}\mathbf{7}\mathbf{7}(-4.5,0)$

6. $A\left(-3\frac{1}{2}, -3\right)$

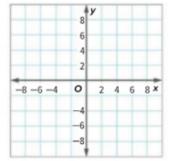
7. *L*(2.5, −3.5)



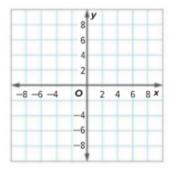
 \mathfrak{g} Graph U(3.5, -3) on the coordinate plane to the right. Then graph its reflection across the x-axis. (Example 3)



 Graph R(−2, 5) on the coordinate plane to the right. Then graph its reflection across the y-axis. (Example 4)



12. Amelia is drawing a map of the park. She graphs the entrance at (2, -3). She reflects (2, -3) across the y-axis. Then Amelia reflects the new point across the x-axis. What figure is graphed on the map? (Example 5)



- 13. A point is reflected across the y-axis. The new point is located at (-4.25, -1.75). Write the ordered pair that represents the original point.
- 14. Model with Mathematics A point is reflected across the x-axis. The new point is (-7.5, 6). What is the distance between the two points?