Copyright © 2011 by Judith A. Muschla, Gary Robert Muschla, and Erin Muschla. All rights reserved.

WORKSHEET 4.4: GRAPHING ORDERED PAIRS ON THE COORDINATE PLANE

Graphing points (called "ordered pairs") requires moving horizontally (across) or vertically (up or down) on the coordinate plane, depending on the values of x and y. To graph (x, y), follow the steps below:

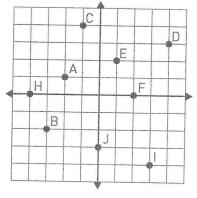
- 1. Start at the origin (0, 0).
- 2. Consider the x-coordinate.
 - If it is 0, remain at the origin.
 - If it is positive, move to the right along the x-axis. Stop at the x-coordinate.
 - If it is negative, move to the left along the x-axis. Stop at the x-coordinate.
- 3. Consider the y-coordinate.
 - If it is 0, graph the point where you stopped after finding the x-coordinate.
 - If it is positive, move up parallel to the y-axis, starting from the x-coordinate. Stop at the y-coordinate. Graph the point.
 - If it is negative, move down parallel to the y-axis, starting from the x-coordinate. Stop at the y-coordinate. Graph the point.

DIRECTIONS: State the letter that is near each ordered pair.

- 1. (1, 2)
- 2. (-3, -2)
- 3. [0, -3]

- [-2, 1]
- **5**. (2, 0)
- **6.** [3, -4]

- 7. (-4, 0)
- 8. [-1, 4]
- 9. (4.3)





CHALLENGE: Is (x, y) ever the same as (y, x)? Explain your answer.

WORKSHEET 4.4: GRAPHING ORDERED PAIRS ON THE COORDINATE PLANE

Graphing points (called "ordered pairs") requires moving horizontally (across) or vertically (up or down) on the coordinate plane, depending on the values of x and y. To graph (x, y), follow the steps below:

1. Start at the origin (0, 0).

2. Consider the x-coordinate.

If it is 0, remain at the origin.

• If it is positive, move to the right along the x-axis. Stop at the x-coordinate.

 \bullet If it is negative, move to the left along the x-axis. Stop at the x-coordinate.

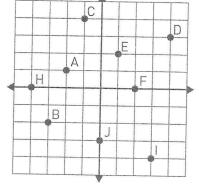
Consider the y-coordinate.

• If it is 0, graph the point where you stopped after finding the x-coordinate.

• If it is positive, move up parallel to the y-axis, starting from the x-coordinate. Stop at the y-coordinate. Graph the point.

 ullet If it is negative, move down parallel to the y-axis, starting from the x-coordinate. Stop at the y-coordinate. Graph the point.

DIRECTIONS: State the letter that is near each ordered pair.





CHALLENGE: Is (x, y) ever the same as (y, x)? Explain your answer.

Yes, but only if the x-coordinate is the same as the y-coordinate.