

Lesson 7-8 • Group 2

Reinforce Understanding

7.8 Small Group • Group 2

I can plot ordered pairs in all four quadrants of the coordinate plane, explain what each part stands for, and build one for a situation I have not seen before.

Worked model

I will plot $(-3, -4)$. I start at the origin $(0, 0)$.

1. The x is -3 , which is negative, so I move 3 units to the LEFT.
2. The y is -4 , which is negative, so I move 4 units DOWN. I place my dot.
3. Both coordinates are negative, so the point is in Quadrant III.

Practice

Complete each exercise. Show the reasoning that supports your answer.

1. Plot one point in each quadrant: $(3, 2)$, $(-4, 1)$, $(-2, -3)$, $(5, -4)$

Plot and label each point on the grid.

Show your thinking

2. For each ordered pair, write the signs of x and y and name the quadrant (or axis).

Complete the table. Show how you found each value.

Point	x sign	y sign	Quadrant or Axis
$(6, -2)$			
$(-3, -5)$			
$(0, 7)$			
$(-1, 8)$			
$(4, 0)$			

Show your work

3. A point (a, b) has $a < 0$ and $b < 0$. In which quadrant does it lie?

Circle the letter of the best answer. Show how you know.

- A. Quadrant I
- B. Quadrant II
- C. Quadrant IV
- D. Quadrant III

Show your work
