

8-6

Study Guide and Intervention

The Coordinate Plane

A **coordinate system** is a grid used to locate points. The horizontal number line is the **x-axis**; the vertical number line is the **y-axis**.

The **x-axis** and **y-axis** separate the **coordinate system** into four regions called **quadrants**.

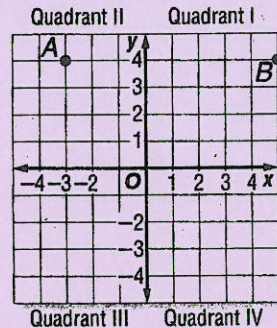
An ordered pair helps you locate any point on the coordinate plane. The first number is the **x-coordinate**. The second number is the **y-coordinate**.

EXAMPLE 1 Identify the ordered pair that names point A.

Step 1 Move left on the x-axis to find the x-coordinate of point A, which is -3.

Step 2 Move up the y-axis to find the y-coordinate, which is 4.

Point A is named by (-3, 4).



EXAMPLE 2 Graph point B at (5, 4).

Use the coordinate plane shown above. Start at 0. The x-coordinate is 5, so move 5 units to the right.

Since the y-coordinate is 4, move 4 units up.

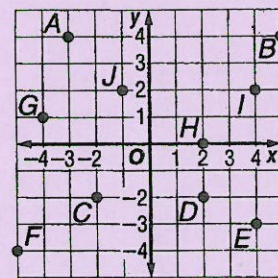
Draw a dot. Label the dot B.

See grid at the top of the page.

EXERCISES

Use the coordinate plane at the right. Write the ordered pair that names each point.

- | | |
|------|------|
| 1. C | 2. D |
| 3. E | 4. F |
| 5. G | 6. H |
| 7. I | 8. J |



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

- | | |
|---------------|--------------|
| 9. A(-5, 5) | 10. M(2, 4) |
| 11. G(0, -5) | 12. D(3, 0) |
| 13. N(-4, -3) | 14. I(2, -3) |

