NAME _____ DATE _____ PERIOD _____

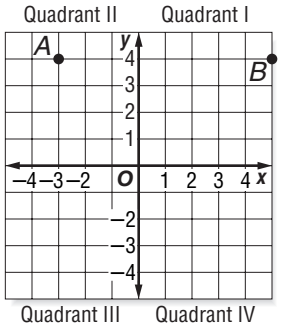
8-6 Study Guide and Intervention

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).**

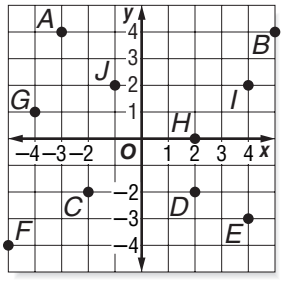
Use the coordinate plane shown above. Start at 0. The x-coordinate is 5, so move 5 units to the right.

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

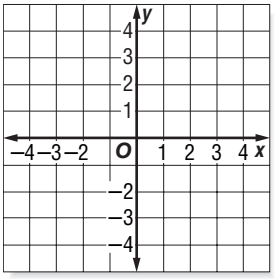
5. G

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. $I(2, -3)$