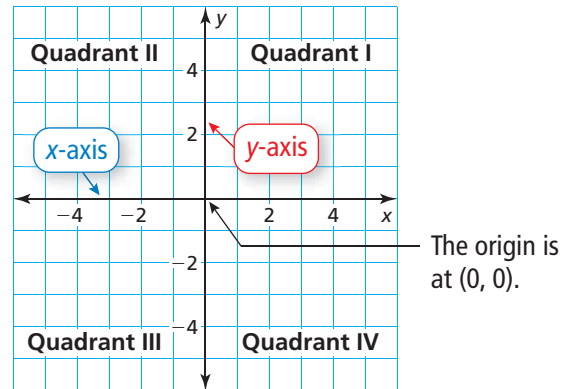
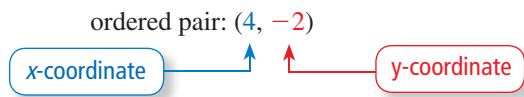


The Coordinate Plane

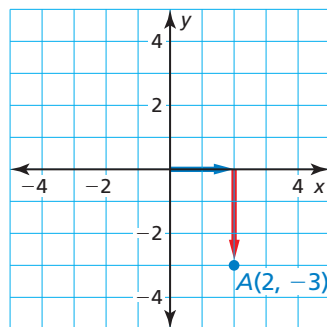
A **coordinate plane** is formed by the intersection of a horizontal number line and a vertical number line. The number lines intersect at the **origin** and separate the coordinate plane into four regions called **quadrants**.

An **ordered pair** is used to locate a point in a coordinate plane.

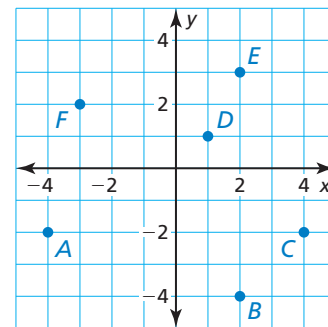


Example 1 Plot the point $A(2, -3)$ in a coordinate plane. Describe the location of the point.

Start at the origin. Move 2 units **right** and 3 units **down**. Then plot the point. The point is in Quadrant IV.



Example 2 What ordered pair corresponds to point A?



Point A is 4 units to the left of the origin and 2 units down. So, the x-coordinate is -4 and the y-coordinate is -2 .

► The ordered pair $(-4, -2)$ corresponds to point A.

Practice

Plot the ordered pair in a coordinate plane. Describe the location of the point.

1. $A(1, 3)$
2. $B(-2, 2)$
3. $C(2, -4)$
4. $D(1, -1)$
5. $E(-4, -2.5)$
6. $F(-3, 0)$
7. $G(0, 1)$
8. $H(4, \frac{1}{2})$

Use the graph in Example 2 to answer the questions.

9. What ordered pair corresponds to point C?
10. What ordered pair corresponds to point F?

Check your answers at BigIdeasMath.com.

