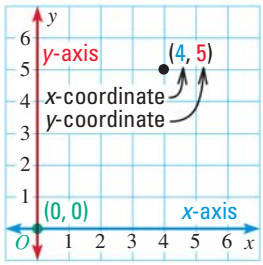
The Coordinate Plane

TEKS 8.7.D

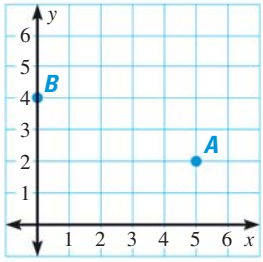
Just as you use a number line to graph numbers, you use a *coordinate plane* to graph *ordered pairs* of numbers.

A **coordinate plane** has a horizontal ***x*-axis** and a vertical ***y*-axis** that intersect at a point called the **origin**. The origin is labeled *O*.

In an **ordered pair**, the first number is the ***x*-coordinate** and the second number is the ***y*-coordinate**. The coordinates of the origin are (0, 0). The ordered pair (4, 5) is graphed at the right.



EXAMPLE **Give the coordinates of points *A* and *B*.**



Point *A* is 5 units to the right of the origin and 2 units up, so the *x*-coordinate is 5 and the *y*-coordinate is 2.

▶ The coordinates of point *A* are (5, 2).

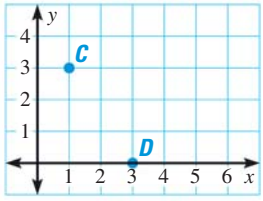
Point *B* is 0 units to the right or left of the origin and 4 units up, so the *x*-coordinate is 0 and the *y*-coordinate is 4.

▶ The coordinates of point *B* are (0, 4).

EXAMPLE **Plot the points *C*(1, 3) and *D*(3, 0) in a coordinate plane.**

To plot the point *C*(1, 3), begin at the origin and move 1 unit to the right, then 3 units up.

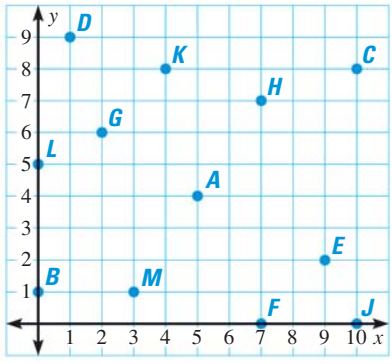
To plot the point *D*(3, 0), begin at the origin and move 3 units right, then 0 units up.



PRACTICE

Give the coordinates of the point.

1. *A*	**2.** *B*	**3.** *C*
4. *D*	**5.** *E*	**6.** *F*
7. *G*	**8.** *H*	**9.** *J*
10. *K*	**11.** *L*	**12.** *M*



Plot the point in a coordinate plane.

13. *M*(1, 7)	**14.** *N*(2, 1)	**15.** *P*(4, 4)
16. *Q*(0, 3)	**17.** *R*(4, 0)	**18.** *S*(6, 8)
19. *T*(3, 6)	**20.** *U*(8, 4)	**21.** *V*(7, 0)
22. *W*(0, 8)	**23.** *X*(3, 5)	**24.** *Z*(5, 6)