

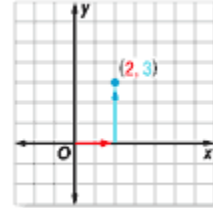
Lesson 1-6

Example 1 Graph Ordered Pairs

Graph each ordered pair on a coordinate system.

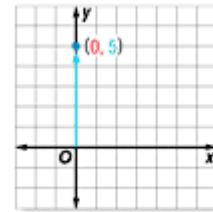
a. $(2, 3)$

- Step 1** Start at the origin.
Step 2 Since the x -coordinate is 2, move 2 units to the right.
Step 3 Since the y -coordinate is 3, move 3 units up. Draw a dot.



b. $(0, 5)$

- Step 1** Start at the origin.
Step 2 Since the x -coordinate is 0, you will not need to move right.
Step 3 Since the y -coordinate is 5, move 5 units up. Draw a dot on the axis.

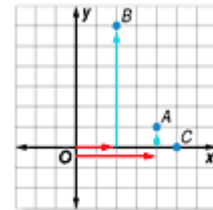


Example 2 Identify Ordered Pairs

Write the ordered pair that names each point.

a. A

- Step 1** Start at the origin.
Step 2 Move right on the x -axis to find the x -coordinate of point A , which is 4.
Step 3 Move up the y -axis to find the y -coordinate, which is 1.



The ordered pair for point A is $(4, 1)$.

b. B

The x -coordinate of B is 2, and the y -coordinate is 6.

The ordered pair for point B is $(2, 6)$.

c. C

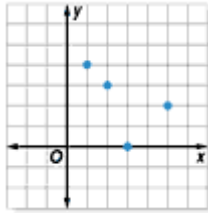
The x -coordinate of C is 5, and the y -coordinate is 0.

The ordered pair for point C is $(5, 0)$.

Example 3 Relations as Tables and Graphs

Express the relation $\{(1, 4), (3, 0), (5, 2), (2, 3)\}$ as a table and as a graph. Then determine the domain and range.

x	y
1	4
3	0
5	2
2	3



The domain is $\{1, 3, 5, 2\}$, and the range is $\{4, 0, 2, 3\}$.

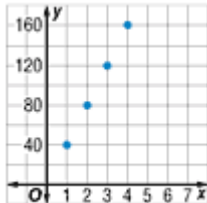
Example 4 Apply Relations

CAR RENTAL A midsize sedan can be rented for \$40 per day. Suppose x represents the number of days.

- a. Make a table of ordered pairs in which the x -coordinate represents the number of days and the y -coordinate represents the rental cost for 1, 2, 3, and 4 days.

x	y	(x, y)
1	40	(1, 40)
2	80	(2, 80)
3	120	(3, 120)
4	160	(4, 160)

- b. Then graph the ordered pairs (days, total cost).



- c. Describe the graph.

The points appear to fall in a line.