

1.7

Represent Functions as Graphs

Goal • Represent functions as graphs.

Your Notes

GRAPHING A FUNCTION

- You can use a graph to represent a _____.
- In a given table, each corresponding pair of input and output values forms an _____.
- An ordered pair of numbers can be plotted as a _____.
- The x-coordinate is the _____.
- The y-coordinate is the _____.
- The horizontal axis of the graph is labeled with the _____.
- The vertical axis is labeled with the the _____.

Example 1 Graph a function

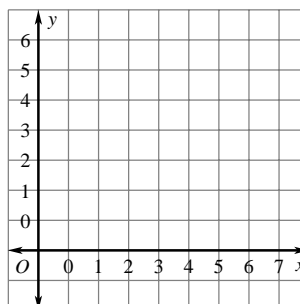
Graph the function $y = x + 1$ with domain 1, 2, 3, 4, and 5.

Solution

Step 1 Make an _____ table.

x					
y					

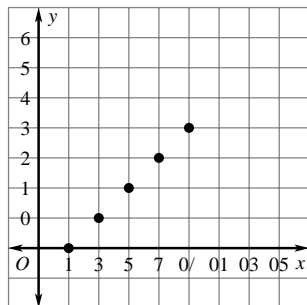
Step 2 Plot a point for each _____ (x, y).



Example 2

Write a function rule for a graph

Write a function rule for the function represented by the graph. Identify the domain and the range of the function.



Solution

Step 1 Make a _____ for the graph.

x					
y					

Step 2 Find a _____ between the input and output values.

Step 3 Write a _____ that describes the relationship.

$$y = \underline{\hspace{2cm}}$$

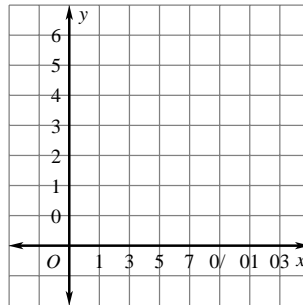
A rule for the function is $y = \underline{\hspace{2cm}}$. The domain of the function is _____.

The range is _____.

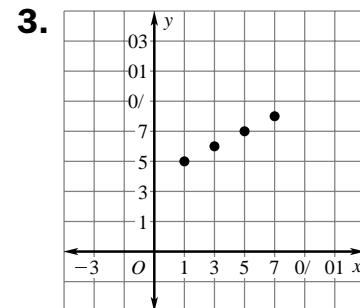
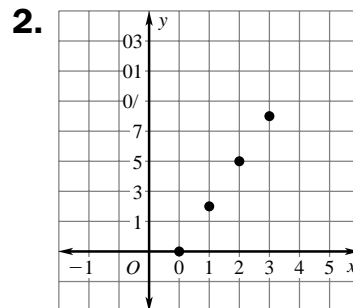
Your Notes

✓ Checkpoint Complete the following exercise.

1. Graph the function $y = \frac{1}{3}x + 1$ with domain 0, 3, 6, 9, and 12.



✓ Checkpoint Write a rule for the function represented by the graph. Identify the domain and the range of the function.



Homework