Name _____ Class _____ Date _____

Review 55

Function Rules, Tables, and Graphs

OBJECTIVE: Graphing a function

MATERIALS: Graph paper

You can use a rule to model a function with a table and a graph.

Example

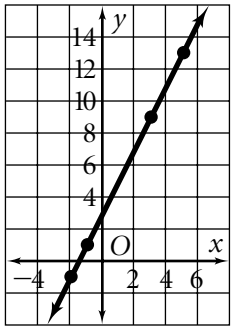
Graph the function $y = 2x + 3$.

Step 1: Choose four different values for x. Write these values in the first column of the table. Choose some negative values for x.

Step 2: Evaluate the function to find y for each value of x.

x	$y = 2x + 3$	(x, y)
-2	$y = 2(-2) + 3 = -1$	$(-2, -1)$
-1	$y = 2(-1) + 3 = 1$	$(-1, 1)$
3	$y = 2(3) + 3 = 9$	$(3, 9)$
5	$y = 2(5) + 3 = 13$	$(5, 13)$

Step 3: Plot the ordered pairs to graph the data.



Exercises

Use a table to graph each function. Choose an appropriate number of values for x. Choose some negative values for x.

1. $y = 4x + 1$

2. $y = x - 2$

3. $y = x + 5$

4. $y = |x| - 3$

5. $y = x^2 - 4$

6. $y = 3x + 3$

7. $y = -|x| + 3$

8. $y = -x^2 + 4$