1.7 EXERCISES

SKILL PRACTICE

1. **VOCABULARY** Copy and complete: Each point on the graph of a function corresponds to an ordered pair (x, y) where x is in the __?__ of the function and y is in the __?__ of the function.

2. **WRITING** Given the graph of a function, describe how to write a rule for the function.
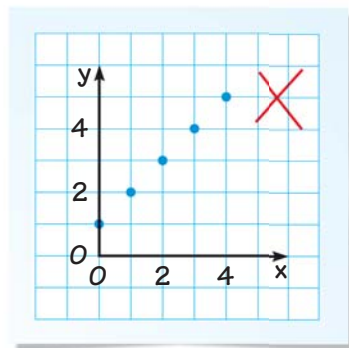
EXAMPLE 1
on p. 43
for Exs. 3–9

GRAPHING FUNCTIONS Graph the function.

3. $y = x + 3$; domain: 0, 1, 2, 3, 4, and 5

4. $y = \frac{1}{2}x + 1$; domain: 0, 1, 2, 3, 4, and 5

5. $y = 2x + 2$; domain: 0, 2, 5, 7, and 10

6. $y = 3x - 1$; domain: 1, 2, 3, 4, and 5

7. $y = x + 5$; domain: 0, 2, 4, 6, 8, and 10

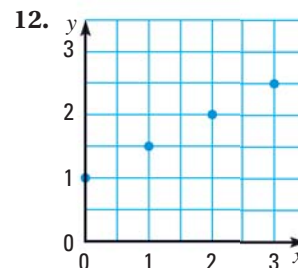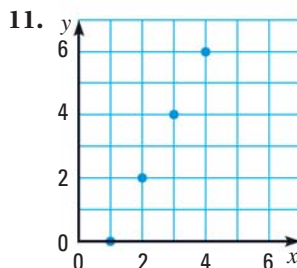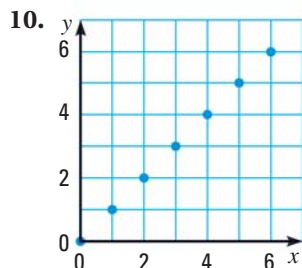8. $y = 2.5x$; domain: 0, 1, 2, 3, and 4

9. **ERROR ANALYSIS** *Describe* and correct the error in graphing the function $y = x - 1$ with domain 1, 2, 3, 4, and 5.

EXAMPLE 3
on p. 44
for Exs. 10–12

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

10.

11.

12.

13. ◆ **TAKS REASONING** The graph of which function is shown?

(A) $y = \frac{1}{2}x + \frac{1}{2}$

(B) $y = x + \frac{1}{2}$

(C) $y = \frac{3}{2}x + \frac{1}{2}$

(D) $y = 2x + \frac{1}{2}$