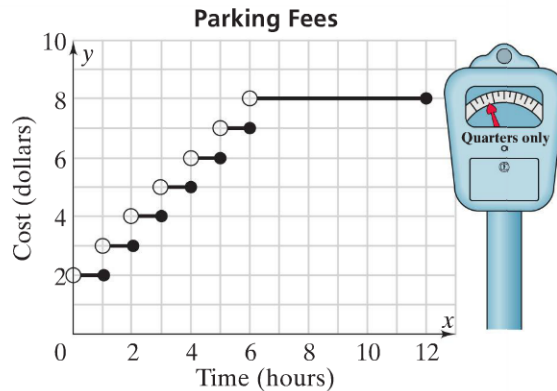**Skills**

● **Lesson 11-1** Find the common difference or ratio in each sequence. Write the rule for each sequence and find the next three terms.

1. 4, 16, 64, . . .

2. $-5, -3, -1, \ldots$

3. $1, \frac{5}{6}, \frac{2}{3}, \frac{1}{2}, \ldots$

4. 12, 6, 3, . . .

● **Lesson 11-2** Use the graph at the right for Exercises 5–7.

5. What is the rate for the first hour of parking?

6. What is the cost to park for $3\frac{1}{2}$ hours?

7. What is the maximum cost to park for up to 12 hours?

Parking Fees

● **Lesson 11-3** Use the function rule $f(x) = 2x - 1$. Find each output.

8. $f(1)$

9. $f(0)$

10. $f(-3)$

11. $f\left(\frac{1}{2}\right)$

● **Lesson 11-4** Use the table to find the slope. Then graph the data and each line.

12.

x	0	1	2	3	4
y	1	3	5	7	9

13.

x	−2	0	2	4	6
y	10	7	4	1	−2

14.

x	−4	−1	2	5	8
y	−5	0	5	10	15

● **Lesson 11-5** Make a table of input-output pairs for each function. Then graph the function.

15. $y = 3x$

16. $y = -2x + 3$

17. $y = \frac{3}{5}x + 1$

18. $y = 4$

● **Lesson 11-6** Do the data in each table represent a linear function? If so, write a rule for the function.

19.

x	0	1	2	3	4
y	8	6	4	2	0

20.

x	−3	−1	1	3	5
y	0	1	2	3	4

21.

x	0	3	6	9	12
y	0	2	4	7	10

● **Lesson 11-7** Make a table and a graph for each quadratic function. Use integers from −4 to 4 for inputs.

22. $y = x^2 + 2$

23. $y = -2x^2$

24. $y = 3x^2$

25. $y = -x^2 + 3$