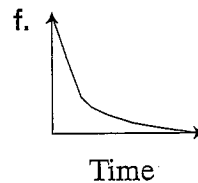
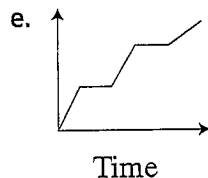
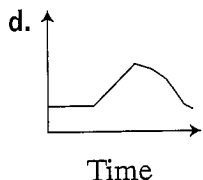
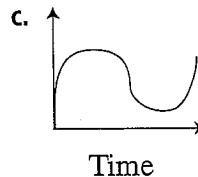
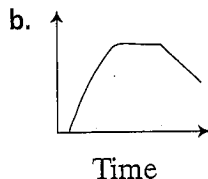
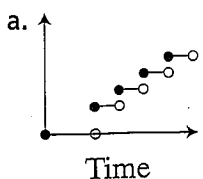


Practice 11-2

Relating Graphs to Events

Each graph represents a situation. Match a graph with the appropriate situation.



1. the amount of an unpaid library fine _____
2. the height above ground of a skydiver during a dive _____
3. one's adrenaline flow when receiving a fright _____
4. the temperature of the air during a 24-h period beginning at 9:00 A.M. _____
5. oven temperature for baking cookies _____
6. elevator ride up with stops _____

Sketch and label a graph of each relationship.

7. the height of a football after it has been kicked
8. the distance traveled by a car that was traveling at 50 mph, but is now stopped by road construction

9. The function table at the right shows the distance in feet that an object falls over time.

Time (s)	Distance (ft)
1	16
2	64
3	144
4	256

Practice 11-3

Functions

Complete the table of input/output pairs for each function.

1. $y = 3x$

Input x	Output y
4	
8	
12	
16	

2. $z = 15n$

Input n	Output z
1	
2	
3	
	60

3. $d = 30 - s$

Input s	Output d
0	
5	
	20
	15

4. $h = 120 \div g$

Input g	Output h
2	
6	
	10
15	

5. $r = 2t - 1$

Input t	Output r
3	
9	
20	
	99

6. $p = 2v - 12$

Input v	Output p
	6
	40
43	
75	

Does each situation represent a function? Explain.

7. Input: the distance that needs to be biked
Output: the time it takes if you bike at 5 mph

8. Input: the time of day you go to the grocery store
Output: the cost of the groceries

Use the function rule $f(x) = 5x + 1$. Find each output.

9. $f(3)$

10. $f(-6)$

11. $f(8)$

12. $f(1.5)$

13. $f(25)$

14. $f(30)$

Use the function rule $f(n) = 4n^2 - 1$. Find each output.

15. $f(0)$

16. $f(1)$

17. $f(-1)$

18. $f(-2)$

19. $f(3)$

20. $f(2.5)$