## 3.3 Practice B

## In Exercises 1–3, evaluate the function when x = -2, 0, and 5.

- **1.** f(x) = 1.5x + 1 **2.** g(x) = 11 3x + 2 **3.** h(x) = -3 x 2
- Let g(x) be the percent of your friends with a landline phone x years after 2000.
  Explain the meaning of each statement.

**a.** 
$$g(0) = 100$$
 **b.**  $g(5) = g(6)$ 

**c.** 
$$g(10) = m$$
 **d.**  $g(11) > g(12)$ 

In Exercises 5–8, find the value of x so that the function has the given value.

**5.** f(x) = 8x - 7; f(x) = 17 **6.** g(x) = -4x + 7; g(x) = 27 **7.**  $f(x) = \frac{1}{3}x - 1; f(x) = 9$ **8.**  $h(x) = 6 - \frac{2}{3}x; h(x) = -2$ 

In Exercises 9 and 10, find the value of x so that f(x) = 7.





In Exercises 11–14, graph the linear function.

- **11.**  $h(x) = -\frac{3}{2}x + 4$  **12.**  $p(x) = \frac{1}{4}x - 1$  **13.** v(x) = -5 + 2x**14.** k(x) = 4 - 3x
- **15.** The function C(x) = 35x + 75 represents the labor cost (in dollars) for Bob's

Auto Repair to replace your alternator, where x is the number of hours. The table shows sample labor costs from its main competitor, Budget Auto Repair. The alternator is estimated to take 5 hours of labor. Which company would you hire? Explain.

Hours	1	2	3
Cost	\$90	\$130	\$170