Name _____ Date _____

# 3.3 Practice A

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

**1.** $f(x) = x - 3$ **2.** $g(x) = -2x$ **3.** $h(x) = 5 - 3x$

**4.** Let $c(t)$ be the number of customers in a department store $t$ hours after 8 A.M. Explain the meaning of each statement.

**a.** $c(0) = 10$ **b.** $c(6) = c(7)$ **c.** $c(k) = 0$ **d.** $c(4) > c(3)$

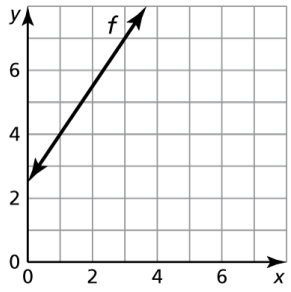
**In Exercises 5–8, find the value of $x$ so that the function has the given value.**

**5.** $f(x) = 6x;\ f(x) = -24$ **6.** $g(x) = -10x;\ g(x) = 15$

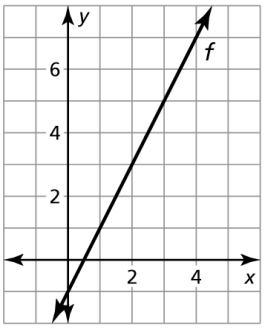
**7.** $f(x) = 3x - 5;\ f(x) = 4$ **8.** $h(x) = 14 - 8x;\ h(x) = -2$

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

**9.**




**10.**




**11.** The function $C(x) = 29x + 54.5$ represents the cost (in dollars) of cable for $x$ months, including the \$54.50 installation fee.

**a.** How much would you have spent on cable after 6 months?

**b.** How many months of cable service can you have for \$344.50?

**In Exercises 12–15, graph the linear function.**

**12.** $r(x) = 2$ **13.** $q(x) = -3x$

**14.** $g(x) = \frac{2}{5}x - 3$ **15.** $j(x) = -\frac{1}{3}x + 5$

**16.** Let $f$ be a function. Use each statement to find the coordinates of a point on the graph of $f$.

**a.** $f(-2)$ is equal to 7. **b.** A solution of the equation $f(t) = 4$ is 2.

Name_____ Date _____

# 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.** $h(x) = -3 - x - 2$

**4.** 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.** $g(11) > g(12)$

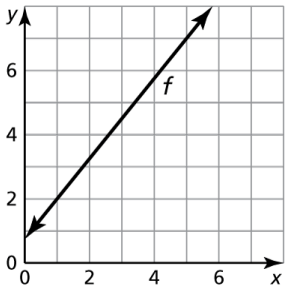
**In Exercises 5–8, find the value of $x$ so that the function has the given value.**

**5.** $f(x) = 8x - 7; f(x) = 17$ **6.** $g(x) = -4x + 7; g(x) = 27$

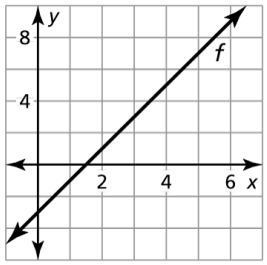
**7.** $f(x) = \frac{1}{3}x - 1; f(x) = 9$ **8.** $h(x) = 6 - \frac{2}{3}x; h(x) = -2$

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

**9.**




**10.**




**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 |