# Lesson 5 Skills Practice

## *Solve Multi-Step Equations*

**Solve each equation. Check your solution.**

**1.** $4(2 + 3c) = 56$   **4**

**2.** $63 = -3(1 - 2n)$   **11**

**3.** $-29 = 5(2a - 1) + 2a$   **−2**

**4.** $-g + 2(3 + g) = -4(g + 1)$   **−2**

**5.** $7p - (3p + 4) = -2(2p - 1) + 10$   **2**

**6.** $-3(t + 5) + (4t + 2) = 8$   **21**

**7.** $\frac{1}{2}(-4 + 6x) = \frac{1}{3}x + \frac{2}{3}(x + 9)$   **4**

**8.** $-8 - n = -3(2n - 4)$   **4**

**9.** $2\left(\frac{1}{2}q + 1\right) = -3(2q - 1) + 4(2q + 1)$   **−5**

**10.** $-4(2 - y) + 3y = 3(y - 4)$   **−1**

**11. HEALTH CLUB** Currently, 96 members participate in the morning workout, and this number has been increasing by 2 people per week. Currently, 80 members participate in the afternoon workout, and this number has been decreasing by 3 people per week. In how many weeks will the number of people working out in the morning be double the number of people working out in the afternoon?   **8 wk**

**12. DISTANCE** Two cyclists leave town at the same time on the same road going in the same direction. Cyclist $A$ is going 6 miles per hour faster than cyclist $B$. After 8 hours, cyclist $A$ has traveled three times the distance as cyclist $B$. Use the equation $24x = 8(x + 6)$ to find how fast cyclist $B$ is traveling.   **3 mph**