#### **Example 1** Solve each equation. Check your solution.

p. 91

11. 
$$3t + 7 = -8$$

**12.** 
$$8 = 16 + 8n$$

13. 
$$-34 = 6m - 4$$

**14.** 
$$9x + 27 = -72$$

**15.** 
$$\frac{y}{5} - 6 = 8$$

**16.** 
$$\frac{f}{-7} - 8 = 2$$

17. 
$$1 + \frac{r}{9} = 4$$

**18.** 
$$\frac{k}{3} + 4 = -16$$

19. 
$$\frac{n-2}{7} = 2$$

**20.** 
$$14 = \frac{6+z}{-2}$$

**21.** 
$$-11 = \frac{a-5}{6}$$

**22.** 
$$\frac{22-w}{3}=-7$$

### **Example 2** p. 92



Plan	Flat Monthly Fee	Anytime Minutes	Cost per Minute After Anytime Minutes
personal	\$29.99	250	\$0.20
business	\$49.99	650	\$0.15
executive	\$59.99	1200	\$0.10

#### Write an equation and solve each problem. **Example 3**

- **24.** Fourteen less than three fourths of a number is negative eight. Find the number.
- 25. Seventeen is thirteen subtracted from six times a number. What is the number?
- **26.** Find three consecutive even integers with the sum of -84.
- **27.** Find three consecutive odd integers with the sum of 141.
- **28.** Find four consecutive integers with the sum of 54.
- **29.** Find four consecutive integers with the sum of -142.

## Solve each equation. Check your solution.

**30.** 
$$-6m - 8 = 24$$

**31.** 
$$45 = 7 - 5n$$

**32.** 
$$\frac{2b}{3} + 6 = 24$$

**33.** 
$$\frac{5x}{9} - 11 = -51$$

**34.** 
$$65 = \frac{3}{4}c - 7$$

**35.** 
$$9 + \frac{2}{3}x = 81$$

**36.** 
$$-\frac{5}{2} = \frac{3}{4}z + \frac{1}{2}$$

**37.** 
$$\frac{5}{6}k + \frac{2}{3} = \frac{4}{3}$$

**38.** 
$$-\frac{1}{5} - \frac{4}{9}a = \frac{2}{15}$$

**39.** 
$$-\frac{3}{7} = \frac{3}{4} - \frac{b}{2}$$

# Write an equation and solve each problem.

- **40. FAMILY** The ages of three brothers are consecutive integers with the sum of 96. How old are the brothers?
- 41. VOLCANOES Moving lava can build up and form beaches at the coast of an island. The growth of an island in a seaward direction may be modeled as 8y + 2 centimeters, where y represents the number of years that the lava flows. An island has expanded 60 centimeters seaward. How long has the lava flowed?