

**1.3 Practice A**

In Exercises 1–8, solve the equation. Check your solution.

1.  $4x - 7 = -3x$

2.  $8b + 2 = 3b + 12$

3.  $7k + 24 = -16 - 3k$

4.  $-5t + 7 = 11t - 25$

5.  $6n + 1 = 2n - 7$

6.  $8h + 5 - 3h = 8h - 4$

7.  $g - 10 + 7g = 15 + 3g$

8.  $-3(w + 4) = 4w - 5$

9. In the equation  $35t + 70(7 - t) = 385$ , the variable  $t$  represents the number of hours you drove at 35 miles per hour on a 385-mile trip. How many hours did you drive at 35 miles per hour?

In Exercises 10–13, solve the equation. Determine whether the equation has *one solution*, *no solution*, or *infinitely many solutions*.

10.  $7y + 13 = 5y - 3$

11.  $8 + 9p = 9p - 7$

12.  $3(7r - 2) = 21r - 6$

13.  $2(3x + 6) = 3(2x - 6)$

14. Describe and correct the error in solving the equation.

$$\begin{array}{l} \times \quad 2(s - 5) = 2(s + 5) \\ \quad 2s - 10 = 2s - 10 \\ \quad \quad 2s = 2s \\ \quad \quad \quad 0 = 0 \end{array}$$

The equation has infinitely many solutions.

15. One serving of oatmeal provides 16% of the dietary fiber you need daily. You must get the remaining 21 grams of dietary fiber from other sources.
- How many grams of dietary fiber do you need daily?
  - Fifty percent of the dietary fiber in one serving of oatmeal is soluble fiber. How many grams of soluble fiber are in one serving of oatmeal?

In Exercises 16 and 17, find the value of  $r$ .

16.  $5(x - 4) + 4 + r = 4(x + 3) + x$

17.  $3(2x - 2) - r + 3x = 2(7x + 1) - 5x - 9$