Extra Practice

Lesson 7-3

(pages 382–386)

Use elimination to solve each system of equations.

1. $x + y = 7$
   $x - y = 9$ **(8, −1)**
2. $2x - y = 32$
   $2x + y = 60$ **(23, 14)**
3. $-y + x = 6$
   $y + x = 5$ $\left(\frac{11}{2}, -\frac{1}{2}\right)$
4. $s + 2t = 6$
   $3s - 2t = 2$ **(2, 2)**
5. $x = y - 7$
   $2x - 5y = -2$ **(−11, −4)**
6. $3x + 5y = -16$
   $3x - 2y = -2$ **(−2, −2)**
7. $x - y = 3$
   $x + y = 3$ **(3, 0)**
8. $x + y = 8$
   $2x - y = 6$ $\left(\frac{14}{3}, \frac{10}{3}\right)$
9. $2s - 3t = -4$
   $s = 7 - 3t$ **(1, 2)**
10. $-6x + 16y = -8$
    $6x - 42 = 16y$ **no solution**
11. $3x + 0.2y = 7$
    $3x = 0.4y + 4$ **(2, 5)**
12. $9x + 2y = 26$
    $1.5x - 2y = 13$ $\left(\frac{26}{7}, -\frac{26}{7}\right)$
13. $x = y$
    $x + y = 7$ **(3.5, 3.5)**
14. $4x - \frac{1}{3}y = 8$
    $5x + \frac{1}{3}y = 6$ $\left(\frac{14}{9}, -\frac{16}{3}\right)$
15. $2x - y = 3$
    $\frac{2}{3}x - y = -1$ **(3, 3)**

Lesson 7-4

(pages 387–392)

Use elimination to solve each system of equations.

1. $-3x + 2y = 10$
   $-2x - y = -5$ **(0, 5)**
2. $2x + 5y = 13$
   $4x - 3y = -13$ **(−1, 3)**
3. $5x + 3y = 4$
   $-4x + 5y = -18$ **(2, −2)**
4. $\frac{1}{3}x - y = -1$
   $\frac{1}{5}x - \frac{2}{5}y = -1$ **(−9, −2)**
5. $3x - 5y = 8$
   $4x - 7y = 10$ **(6, 2)**
6. $x - 0.5y = 1$
   $0.4x + y = -2$ **(0, −2)**
7. $x + 8y = 3$
   $4x - 2y = 7$ $\left(\frac{31}{17}, \frac{5}{34}\right)$
8. $4x - y = 4$
   $x + 2y = 3$ $\left(\frac{11}{9}, \frac{8}{9}\right)$
9. $3y - 8x = 9$
   $y - x = 2$ $\left(-\frac{3}{5}, \frac{7}{5}\right)$
10. $x + 4y = 30$
    $2x - y = -6$ $\left(\frac{2}{3}, \frac{22}{3}\right)$
11. $3x - 2y = 0$
    $4x + 4y = 5$ $\left(\frac{1}{2}, \frac{3}{4}\right)$
12. $9x - 3y = 5$
    $x + y = 1$ $\left(\frac{2}{3}, \frac{1}{3}\right)$
13. $2x - 7y = 9$
    $-3x + 4y = 6$ **(−6, −3)**
14. $2x - 6y = -16$
    $5x + 7y = -18$ **(−5, 1)**
15. $6x - 3y = -9$
    $-8x + 2y = 4$ $\left(\frac{1}{2}, 4\right)$