

**Exercise 6.3**

answers on p. 433

Solve these equations

$$\begin{aligned} 1. \quad & 3x + y = 11 \\ & 2x - y = 4 \end{aligned}$$

$$\begin{aligned} 3. \quad & 5x - y = 6 \\ & 2x + y = 8 \end{aligned}$$

$$\begin{aligned} 5. \quad & 2x + 5y = 13 \\ & 5x + 2y = 22 \end{aligned}$$

$$\begin{aligned} 7. \quad & \frac{2}{5}x + \frac{1}{3}y = 1 \\ & \frac{3}{5}x - \frac{1}{9}y = 7 \end{aligned}$$

$$\begin{aligned} 9. \quad & \frac{2}{3}x + \frac{3}{4}y = 7 \\ & \frac{5}{6}x - \frac{1}{2}y = 3 \end{aligned}$$

$$\begin{aligned} 11. \quad & 2(x + 1) + 3(y - 1) = 12 \\ & (3x - 1) - (y - 2) = 4 \end{aligned}$$

$$\begin{aligned} 13. \quad & (x - 3) - 2(y + 4) = -8 \\ & 2(3 + 2x) - 5(4 - 3y) = 21 \end{aligned}$$

$$\begin{aligned} 15. \quad & 0.2x + 0.7y = 1 \\ & 0.4x - 1.5y = -0.9 \end{aligned}$$

$$\begin{aligned} 17. \quad & 0.7x - 1.2y = -11.5 \\ & 0.5x + 3.5y = 31 \end{aligned}$$

$$19. \quad 2p - 5q = 6p + 3q = 9$$

$$\begin{aligned} 2. \quad & x + 3y = 13 \\ & x + 2y = 10 \end{aligned}$$

$$\begin{aligned} 4. \quad & 3x - 4y = 7 \\ & 2x + y = 12 \end{aligned}$$

$$\begin{aligned} 6. \quad & 3x - 2y = 1 \\ & 2x + 3y = 18 \end{aligned}$$

$$\begin{aligned} 8. \quad & \frac{1}{4}x + \frac{2}{3}y = 5 \\ & \frac{3}{4}x + y = 6 \end{aligned}$$

$$\begin{aligned} 10. \quad & \frac{7}{8}x + \frac{3}{5}y = 5 \\ & \frac{3}{5}x - \frac{4}{25}y = 2 \end{aligned}$$

$$\begin{aligned} 12. \quad & 2(y + 2) - 3(x - 1) = 1 \\ & 3(2 + y) + 4(3 - x) = 11 \end{aligned}$$

$$\begin{aligned} 14. \quad & 70(x - 1) + 90(y + 3) = 95 \\ & 6(2x + 1) - 8(3y - 2) = 4 \end{aligned}$$

$$\begin{aligned} 16. \quad & 1.2x + y = 3.8 \\ & 0.5x + 0.8y = 3.5 \end{aligned}$$

$$\begin{aligned} 18. \quad & 1.5x - 0.8y = 0.3 \\ & 0.6x - 3.6y = -4.8 \end{aligned}$$

$$20. \quad 3c - d = 12c + 5d = 9$$

**Exercise 6.3** (p. 148)

1.  $x = 3, y = 2$
2.  $x = 4, y = 3$
3.  $x = 2, y = 4$
4.  $x = 5, y = 2$
5.  $x = 4, y = 1$
6.  $x = 3, y = 4$
7.  $x = 10, y = -9$
8.  $x = -4, y = 9$
9.  $x = 6, y = 4$
10.  $x = 4, y = 2\frac{1}{2}$
11.  $x = 2, y = 3$
12.  $x = 4, y = 3$
13.  $x = 5, y = 1$
14.  $x = -1\frac{1}{2}, y = 0$
15.  $x = 1.5, y = 1$
16.  $x = -1, y = 5$
17.  $x = -1, y = 9$
18.  $x = 1, y = 1.5$
19.  $p = 2, q = -1$
20.  $c = 2, d = -3$