

(Level 1)

Solve the following simultaneous linear equations. [Nos. 1–8]

1.
$$\begin{cases} x + y = 2 \\ x - y = 10 \end{cases}$$

2.
$$\begin{cases} x + 6y = 19 \\ x + 2y = 7 \end{cases}$$

3.
$$\begin{cases} 2a + b = 9 \\ 8a - b = 21 \end{cases}$$

4.
$$\begin{cases} 5p + 4q = 1 \\ 3p - 4q = 7 \end{cases}$$

5.
$$\begin{cases} r + 5s = 2 \\ 4r - 3s = 31 \end{cases}$$

6.
$$\begin{cases} x + 7y = 9 \\ -6x - 5y = 20 \end{cases}$$

7.
$$\begin{cases} 3\ell - 2m = 5 \\ 2\ell + 3m = 12 \end{cases}$$

8.
$$\begin{cases} 3s - 7t = 2 \\ 7s - 3t = 18 \end{cases}$$

(Level 2)

Solve the following simultaneous linear equations. [Nos. 9–20]

9.
$$\begin{cases} y - 2x = 4 \\ 2x + 9y = -24 \end{cases}$$

10.
$$\begin{cases} 5 - x - y = 0 \\ 4x - y = 15 \end{cases}$$

11.
$$\begin{cases} 4m - 3n + 1 = 0 \\ 3m + n - 9 = 0 \end{cases}$$

12.
$$\begin{cases} 2u = 3v \\ u + 2v - 7 = 0 \end{cases}$$

13.
$$\begin{cases} 3x - 2y = 10 \\ 3y - 4x = 17 \end{cases}$$

14.
$$\begin{cases} 10x + 12y = -1 \\ 9y - 4x = 5 \end{cases}$$

15.
$$\begin{cases} 5x = 2(1 - y) \\ 2x + 5y = 5 \end{cases}$$

16.
$$\begin{cases} \frac{a}{2} + \frac{b}{3} = 13 \\ \frac{a}{3} - \frac{b}{4} = 3 \end{cases}$$

17.
$$\begin{cases} 5s - 1 = 7r \\ 8(r + 3) = 90 - s \end{cases}$$

18.
$$\begin{cases} 1.25y - 0.75z = 1 \\ 0.25y + 1.25z = 17 \end{cases}$$