

# 連立方程式 (いろいろな連立方程式②)

組 番 名前

1 次の連立方程式を解きなさい。

$$\textcircled{1} \begin{cases} \frac{x}{2} + \frac{y}{3} = 5 \\ 2x - y = -1 \end{cases}$$

$$\begin{array}{r} 3x + 2y = 30 \quad (\times 6) \\ +) 4x - 2y = -2 \quad (\times 2) \\ \hline 7x = 28 \\ x = 4 \end{array}$$

$x = 4, y = 9$

$$\textcircled{2} \begin{cases} x = 2y - 5 \\ \frac{1}{4}x - \frac{3}{8}y = -1 \end{cases}$$

$$\begin{array}{r} 2x - 3y = -8 \\ 2(2y - 5) - 3y = -8 \\ 4y - 10 - 3y = -8 \\ 4y - 10 - 3y = -8 \\ y = 2 \\ x = -1 \end{array}$$

$x = -1, y = 2$

$$\textcircled{3} \begin{cases} 4x - 3y = 5 \\ 0.1x - 0.3y = -1 \end{cases}$$

$$\begin{array}{r} x - 3y = 10 \quad (\times 10) \\ -) 4x - 3y = 5 \\ \hline -3x = -15 \\ x = 5 \end{array}$$

$x = 5, y = 5$

$$\textcircled{4} \begin{cases} 0.04x - 0.07y = 0.19 \\ -3x + 2y = 2 \end{cases}$$

$$\begin{array}{r} 4x - 7y = 19 \quad (\times 100) \\ -3x + 2y = 2 \quad (\times 3) \\ \hline 12x - 21y = 57 \\ +) -12x + 8y = 6 \\ \hline -13y = 65 \\ y = -5 \\ x = -4 \end{array}$$

$x = -4, y = -5$

$$\textcircled{5} \begin{cases} 2y = x - 1 \\ 3x + y = 4(9 - y) \end{cases}$$

$$\begin{array}{r} 3x + y = 36 - 4y \quad (\times 2) \\ 3x + 5y = 36 \\ +) -3x + 6y = -3 \\ \hline 11y = 33 \\ y = 3 \end{array}$$

$x = 7, y = 3$

$$\textcircled{6} \begin{cases} 5x + 7y = 3 \\ 3x + 2(x + 4y) = 2 \end{cases}$$

$$\begin{array}{r} 3x + 2x + 8y = 2 \\ 5x + 8y = 2 \\ -) 5x + 7y = 3 \\ \hline y = -1 \\ x = 2 \end{array}$$

$x = 2, y = -1$

$$\textcircled{7} \begin{cases} 5x - \frac{3}{2}y = 12 \\ \frac{2}{9}x + \frac{1}{6}y = 1 \end{cases}$$

$$\begin{array}{r} 10x - 3y = 24 \quad (\times 2) \\ +) 4x + 3y = 18 \quad (\times 18) \\ \hline 14x = 42 \\ x = 3 \end{array}$$

$x = 3, y = 2$

$$\textcircled{8} \begin{cases} 0.3x + 0.4y = 1 \\ 5x + 2y = -2 \end{cases}$$

$$\begin{array}{r} 3x + 4y = 10 \quad (\times 10) \\ -) 10x + 4y = -4 \quad (\times 2) \\ \hline -7x = 14 \\ x = -2 \\ y = 4 \end{array}$$

$x = -2, y = 4$

2 次の連立方程式を解きなさい。

$$\textcircled{1} \begin{cases} x + y = 2x - y = 6 \end{cases}$$

$$\begin{array}{r} x + y = 6 \\ +) 2x - y = 6 \\ \hline 3x = 12 \\ x = 4 \\ y = 2 \end{array}$$

$x = 4, y = 2$

$$\textcircled{2} 2x + 5y = x - 6y - 3 = y + 12$$

$$\begin{array}{r} 2x + 5y = y + 12 \\ x - 6y - 3 = y + 12 \\ \hline 2x + 4y = 12 \\ -) 2x - 14y = 30 \\ \hline 18y = -18 \\ y = -1 \\ x = 8 \end{array}$$

$x = 8, y = -1$