

連立方程式 ② 答え

※ 解答は一例です。

☆ 次の連立方程式を解きましょう。

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

$$\begin{array}{r} 2x + 3y = 1 \\ +) 3x - 3y = -6 \\ \hline 5x \quad \quad = -5 \\ x \quad \quad = -1 \end{array}$$

$2x + 3y = 1$ に代入

$$\begin{array}{r} -2 + 3y = 1 \\ y = 1 \end{array}$$

$$(x, y) = (-1, 1)$$

$$\begin{array}{r} 4x - 5y = 3 \\ -) 4x + 8y = -36 \\ \hline -13y = 39 \\ y = -3 \end{array}$$

$4x - 5y = 3$ に代入

$$\begin{array}{r} 4x + 15 = 3 \\ x = -3 \end{array}$$

$$(x, y) = (-3, -3)$$

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

$x + y = -3$ に代入

$$\begin{array}{r} 2 + y = -3 \\ y = -5 \end{array}$$

$$(x, y) = (2, -5)$$

$$\textcircled{4} \begin{cases} x - 4y = 6 \\ (3x + y = 5) \times 4 \end{cases} \quad \textcircled{5} \begin{cases} (3x - y = 4) \times 2 \\ x + 2y = -1 \end{cases} \quad \textcircled{6} \begin{cases} (-x + y = -1) \times 4 \\ 4x - 5y = 7 \end{cases}$$

$$\begin{array}{r} x - 4y = 6 \\ +) 12x + 4y = 20 \\ \hline 13x \quad \quad = 26 \\ x \quad \quad = 2 \end{array}$$

$x - 4y = 6$ に代入

$$\begin{array}{r} 2 - 4y = 6 \\ y = -1 \end{array}$$

$$(x, y) = (2, -1)$$

$$\begin{array}{r} 6x - 2y = 8 \\ +) x + 2y = -1 \\ \hline 7x \quad \quad = 7 \\ x \quad \quad = 1 \end{array}$$

$x + 2y = -1$ に代入

$$\begin{array}{r} 1 + 2y = -1 \\ y = -1 \end{array}$$

$$(x, y) = (1, -1)$$

$$\begin{array}{r} -4x + 4y = -4 \\ +) 4x - 5y = 7 \\ \hline -y = 3 \\ y = -3 \end{array}$$

$4x - 5y = 7$ に代入

$$\begin{array}{r} 4x + 15 = 7 \\ x = -2 \end{array}$$

$$(x, y) = (-2, -3)$$