

連立方程式 加減法2

連立方程式の計算

NO.1

学習日 月 日

名前

/5 点

◆次の連立方程式を解きなさい

$$(1) \quad \begin{cases} 3x - 2y = 12 \\ 2x + 3y = -5 \end{cases}$$

$$(2) \quad \begin{cases} 4x + 3y = 9 \\ 2x - y = 7 \end{cases}$$

$$(3) \quad \begin{cases} 4x - 5y = -18 \\ 2x + 3y = 2 \end{cases}$$

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

$$(5) \quad \begin{cases} 3x - 4y = 1 \\ 2x + 3y = 12 \end{cases}$$

解答

$$(1) \quad \begin{cases} 3x - 2y = 12 & \cdots\textcircled{1} \\ 2x + 3y = -5 & \cdots\textcircled{2} \end{cases}$$

① $\times 2$ - ② $\times 3$ で,

$$\begin{array}{r} 6x - 4y = 24 \\ -) \quad 6x + 9y = -15 \\ \hline -13y = 39 \\ y = -3 \end{array}$$

$y = -3$ を②に代入して,

$$2x + 3 \times (-3) = -5$$

$$2x = 4$$

$$x = 2$$

$$x = 2 \quad y = -3$$

$$(2) \quad \begin{cases} 4x + 3y = 9 & \cdots\textcircled{1} \\ 2x - y = 7 & \cdots\textcircled{2} \end{cases}$$

① $\times 1$ - ② $\times 2$ で,

$$\begin{array}{r} 4x + 3y = 9 \\ -) \quad 4x - 2y = 14 \\ \hline 5y = -5 \\ y = -1 \end{array}$$

$y = -1$ ②に代入して,

$$x + 1 = 7$$

$$2x = 6$$

$$x = 3$$

$$x = 3 \quad y = -1$$

$$(3) \quad \begin{cases} 4x - 5y = -18 & \cdots\textcircled{1} \\ 2x + 3y = 2 & \cdots\textcircled{2} \end{cases}$$

① $\times 1$ - ② $\times 2$ で,

$$\begin{array}{r} 4x - 5y = -18 \\ -) \quad 4x + 6y = 4 \\ \hline 11y = -22 \\ y = -2 \end{array}$$

$y = -2$ を②に代入して,

$$2x - 3 \times (-2) = 2$$

$$2x = -4$$

$$x = -2$$

$$x = -2 \quad y = -2$$

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

① $\times 3$ - ② $\times 2$ で,

$$\begin{array}{r} 6x + 15y = 12 \\ -) \quad 6x + 2y = -14 \\ \hline 13y = 26 \\ y = 2 \end{array}$$

$y = 2$ を①に代入して,

$$2x + 5 \times 2 = 4$$

$$x = -3$$

$$x = -3 \quad y = 2$$

$$(5) \quad \begin{cases} 3x - 4y = 1 & \dots ① \\ 2x + 3y = 12 & \dots ② \end{cases}$$

① $\times 2$ - ② $\times 3$ で,

$$\begin{array}{r} 6x - 8y = 2 \\ -) \quad 6x + 9y = 36 \\ \hline -17y = -34 \\ y = 2 \end{array}$$

$y = 2$ を①に代入して,

$$3x - 4 \times 2 = 1$$

$$x = 3$$

$$x = 3 \quad y = 2$$