

連立方程式 加減法2

連立方程式の計算

NO.2

学習日 月 日

名前

/5 点

◆次の連立方程式を解きなさい

$$(1) \quad \begin{cases} 2x + 3y = 12 \\ 5x + 3y = 21 \end{cases}$$

$$(2) \quad \begin{cases} 2x - 3y = 16 \\ x + 2y = 1 \end{cases}$$

$$(3) \quad \begin{cases} 4x + 5y = 2 \\ 2x - 3y = -10 \end{cases}$$

$$(4) \quad \begin{cases} 3x + 5y = 11 \\ 6x - 3y = 9 \end{cases}$$

$$(5) \quad \begin{cases} 2x + 7y = -3 \\ 5x - 9y = 19 \end{cases}$$

解答

$$(1) \quad \begin{cases} 2x + 3y = 12 & \cdots\textcircled{1} \\ 5x + 3y = 21 & \cdots\textcircled{2} \end{cases}$$

① $\times 1$ - ② $\times 1$ で,

$$\begin{array}{r} 2x + 3y = 12 \\ -) 5x + 3y = 21 \\ \hline -3x = -9 \end{array}$$

$$x = 3$$

$x = 3$ を①に代入して,

$$2 \times 3 + 3y = 12$$

$$3y = 6$$

$$y = 2$$

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

$$(2) \quad \begin{cases} 2x - 3y = 16 & \cdots\textcircled{1} \\ x + 2y = 1 & \cdots\textcircled{2} \end{cases}$$

① $\times 1$ - ② $\times 2$ で,

$$\begin{array}{r} 2x - 3y = 16 \\ -) 2x + 4y = 2 \\ \hline -7y = 14 \end{array}$$

$$y = -2$$

$y = -2$ ②に代入して,

$$x + 4 = 1$$

$$x = -3$$

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

$$(3) \quad \begin{cases} 4x + 5y = 2 & \cdots\textcircled{1} \\ 2x - 3y = -10 & \cdots\textcircled{2} \end{cases}$$

① $\times 1$ - ② $\times 2$ で,

$$\begin{array}{r} 4x + 5y = 2 \\ -) 4x - 6y = -20 \\ \hline 11y = 22 \end{array}$$

$$y = 2$$

$y = 2$ を①に代入して,

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

$$x = -2$$

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

$$(4) \quad \begin{cases} 3x + 5y = 11 & \dots ① \\ 6x - 3y = 9 & \dots ② \end{cases}$$

① $\times 2$ - ② で,

$$\begin{array}{r} 6x + 10y = 22 \\ -) 6x - 3y = 9 \\ \hline 13y = 13 \end{array}$$

$$y = 1$$

$y = 1$ を①に代入して,

$$3x + 5 \times 1 = 11$$

$$x = 2$$

$$x = 2 \quad y = 1$$

$$(5) \quad \begin{cases} 2x + 7y = -3 & \dots ① \\ 5x - 9y = 19 & \dots ② \end{cases}$$

① $\times 5$ - ② $\times 2$ で,

$$\begin{array}{r} 10x + 35y = -15 \\ -) 10x - 18y = 38 \\ \hline 53y = -53 \end{array}$$

$$y = -1$$

$y = -1$ を①に代入して,

$$2x + 7 \times (-1) = -3$$

$$x = 2$$

$$x = 2 \quad y = -1$$