

1 次の連立方程式を加減法で解きなさい。

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

$$(2) \begin{cases} 7x - 5y = -24 & \dots\dots \textcircled{1} \\ 21x + 3y = -36 & \dots\dots \textcircled{2} \end{cases}$$

$$(3) \begin{cases} -5x + 4y = -41 & \dots\dots \textcircled{1} \\ 2x + 5y = -10 & \dots\dots \textcircled{2} \end{cases}$$

$$(4) \begin{cases} 2x - 5y = 9 & \dots\dots \textcircled{1} \\ -3x - 11y = 42 & \dots\dots \textcircled{2} \end{cases}$$

1 次の連立方程式を加減法で解きなさい。

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

$$① \quad -5x + 3y = -18$$

$$② \times 5 \quad +) \quad 5x + 10y = 5$$

$$\hline 13y = -13$$

$$y = -1$$

$y = -1$ を②に代入すると、

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

$$x = 3$$

$$\text{答} \begin{cases} x = 3 \\ y = -1 \end{cases}$$

$$(2) \begin{cases} 7x - 5y = -24 & \dots\dots ① \\ 21x + 3y = -36 & \dots\dots ② \end{cases}$$

$$① \times 3 \quad 21x - 15y = -72$$

$$② \quad -) \quad 21x + 3y = -36$$

$$\hline -18y = -36$$

$$y = 2$$

$y = 2$ を①に代入すると、

$$7x - 5 \times 2 = -24$$

$$7x = -14$$

$$x = -2$$

$$\text{答} \begin{cases} x = -2 \\ y = 2 \end{cases}$$

$$(3) \begin{cases} -5x + 4y = -41 & \dots\dots ① \\ 2x + 5y = -10 & \dots\dots ② \end{cases}$$

$$① \times 2 \quad -10x + 8y = -82$$

$$② \times 5 \quad +) \quad 10x + 25y = -50$$

$$\hline 33y = -132$$

$$y = -4$$

$y = -4$ を②に代入すると、

$$2x + 5 \times (-4) = -10$$

$$2x = 10$$

$$x = 5$$

$$\text{答} \begin{cases} x = 5 \\ y = -4 \end{cases}$$

$$(4) \begin{cases} 2x - 5y = 9 & \dots\dots ① \\ -3x - 11y = 42 & \dots\dots ② \end{cases}$$

$$① \times 3 \quad 6x - 15y = 27$$

$$② \times 2 \quad +) \quad -6x - 22y = 84$$

$$\hline -37y = 111$$

$$y = -3$$

$y = -3$ を①に代入すると、

$$2x - 5 \times (-3) = 9$$

$$2x = -6$$

$$x = -3$$

$$\text{答} \begin{cases} x = -3 \\ y = -3 \end{cases}$$