

1 次の連立方程式を加減法で解きなさい。

$$(1) \begin{cases} 7x + 2y = 25 & \dots\dots ① \\ 7x + 8y = 37 & \dots\dots ② \end{cases}$$

$$(2) \begin{cases} 5x + 9y = 2 & \dots\dots ① \\ 5x - 7y = 34 & \dots\dots ② \end{cases}$$

$$(3) \begin{cases} 6x - 2y = -40 & \dots\dots ① \\ -2x + 2y = 16 & \dots\dots ② \end{cases}$$

$$(4) \begin{cases} -3x - 5y = 46 & \dots\dots ① \\ 4x - 5y = 32 & \dots\dots ② \end{cases}$$

1 次の連立方程式を加減法で解きなさい。

$$(1) \begin{cases} 7x + 2y = 25 & \dots\dots ① \\ 7x + 8y = 37 & \dots\dots ② \end{cases}$$

$$\begin{array}{r} ① \quad 7x + 2y = 25 \\ ② \quad -) 7x + 8y = 37 \\ \hline \quad \quad -6y = -12 \\ \quad \quad \quad y = 2 \end{array}$$

$y = 2$ を①に代入すると、

$$\begin{array}{r} 7x + 2 \times 2 = 25 \\ 7x = 21 \\ x = 3 \end{array}$$

$$\text{答} \begin{cases} x = 3 \\ y = 2 \end{cases}$$

$$(2) \begin{cases} 5x + 9y = 2 & \dots\dots ① \\ 5x - 7y = 34 & \dots\dots ② \end{cases}$$

$$\begin{array}{r} ① \quad 5x + 9y = 2 \\ ② \quad -) 5x - 7y = 34 \\ \hline \quad \quad 16y = -32 \\ \quad \quad \quad y = -2 \end{array}$$

$y = -2$ を①に代入すると、

$$\begin{array}{r} 5x + 9 \times (-2) = 2 \\ 5x = 20 \\ x = 4 \end{array}$$

$$\text{答} \begin{cases} x = 4 \\ y = -2 \end{cases}$$

$$(3) \begin{cases} 6x - 2y = -40 & \dots\dots ① \\ -2x + 2y = 16 & \dots\dots ② \end{cases}$$

$$\begin{array}{r} ① \quad 6x - 2y = -40 \\ ② \quad +) -2x + 2y = 16 \\ \hline \quad \quad 4x = -24 \\ \quad \quad \quad x = -6 \end{array}$$

$x = -6$ を①に代入すると、

$$\begin{array}{r} 6 \times (-6) - 2y = -40 \\ -2y = -4 \\ y = 2 \end{array}$$

$$\text{答} \begin{cases} x = -6 \\ y = 2 \end{cases}$$

$$(4) \begin{cases} -3x - 5y = 46 & \dots\dots ① \\ 4x - 5y = 32 & \dots\dots ② \end{cases}$$

$$\begin{array}{r} ① \quad -3x - 5y = 46 \\ ② \quad -) 4x - 5y = 32 \\ \hline \quad \quad -7x = 14 \\ \quad \quad \quad x = -2 \end{array}$$

$x = -2$ を①に代入すると、

$$\begin{array}{r} -3 \times (-2) - 5y = 46 \\ -5y = 40 \\ y = -8 \end{array}$$

$$\text{答} \begin{cases} x = -2 \\ y = -8 \end{cases}$$