

## (2) 代入法

$$\text{例(1)} \begin{cases} 2x + 3y = 24 \quad \dots \textcircled{1} \\ y = 10 - x \quad \dots \textcircled{2} \end{cases}$$

$\downarrow$  代入

$$2x + 3(10 - x) = 24$$

②を①に代入すると、

$$\begin{aligned} 2x + 3(10 - x) &= 24 \\ 2x + 30 - 3x &= 24 \\ 2x - 3x &= 24 - 30 \\ -x &= -6 \\ x &= 6 \end{aligned}$$

$x=6$ を②に代入すると、

$$\begin{aligned} y &= 10 - 6 \\ &= 4 \end{aligned}$$

$$\begin{cases} x = 6 \\ y = 4 \end{cases} \#$$

$$(2) \begin{cases} 3x + 2y = 10 \quad \dots \textcircled{1} \\ x - 5y = 9 \quad \dots \textcircled{2} \end{cases}$$

②より、 $x = 9 + 5y \quad \dots \textcircled{3}$

③を①に代入すると、

$$\begin{aligned} 3(9 + 5y) + 2y &= 10 \\ 27 + 15y + 2y &= 10 \\ 15y + 2y &= 10 - 27 \\ 17y &= -17 \\ y &= -1 \end{aligned}$$

$y=-1$ を③に代入すると、

$$\begin{aligned} x &= 9 + 5 \times (-1) \\ &= 9 - 5 \\ &= 4 \end{aligned}$$

$$\begin{cases} x = 4 \\ y = -1 \end{cases} \#$$