

2章(連立方程式) 1節(連立方程式)

5 . 加減法(2)

年 組 番

名前

1. 次の連立方程式を解きなさい。

$$\begin{cases} x + 2y = 7 & \dots \\ 2x + 3y = 13 & \dots \end{cases}$$

$$\begin{array}{r} 2x + 4y = 14 \quad \dots \times 2 \\ -) 2x + 3y = 13 \quad \dots \\ \hline y = 1 \end{array}$$

y = 1 を 式に代入して、

$$\begin{array}{r} x + 2 \times 1 = 7 \\ x + 2 = 7 \\ x = 5 \end{array}$$

$$\begin{cases} x = 5 \\ y = 1 \end{cases}$$

$$\begin{cases} x - 3y = -3 & \dots \\ 2x - y = 9 & \dots \end{cases}$$

$$\begin{array}{r} x - 3y = -3 \quad \dots \\ -) 6x - 3y = 27 \quad \dots \times 3 \\ \hline -5x = -30 \\ x = 6 \end{array}$$

x = 6 を 式に代入して、

$$\begin{array}{r} 2 \times 6 - y = 9 \\ 12 - y = 9 \\ y = 3 \end{array}$$

$$\begin{cases} x = 6 \\ y = 3 \end{cases}$$

$$\begin{cases} 5x + 8y = 4 & \dots \\ 3x + 7y = -2 & \dots \end{cases}$$

$$\begin{array}{r} 15x + 24y = 12 \quad \dots \times 3 \\ -) 15x + 35y = -10 \quad \dots \times 5 \\ \hline -11y = 22 \\ y = -2 \end{array}$$

y = -2 を 式に代入して、

$$\begin{array}{r} 5x + 8 \times (-2) = 4 \\ 5x - 16 = 4 \\ 5x = 20 \\ x = 4 \end{array}$$

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

$$\begin{cases} x + 3y = -10 & \dots \\ 4x - 6y = -4 & \dots \end{cases}$$

$$\begin{array}{r} 2x + 6y = -20 \quad \dots \times 2 \\ +) 4x - 6y = -4 \quad \dots \\ \hline 6x = -24 \\ x = -4 \end{array}$$

x = -4 を 式に代入して、

$$\begin{array}{r} -4 + 3y = -10 \\ 3y = -6 \end{array}$$

$$y = -2$$

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

$$\begin{cases} 2x + 5y = 13 & \dots \\ 3x + 4y = 9 & \dots \end{cases}$$

$$\begin{array}{r} 6x + 15y = 39 \quad \dots \times 3 \\ -) 6x + 8y = 18 \quad \dots \times 2 \\ \hline 7y = 21 \\ y = 3 \end{array}$$

y = 3 を 式に代入して、

$$\begin{array}{r} 2x + 5 \times 3 = 13 \\ 2x = -2 \\ x = -1 \end{array}$$

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

$$\begin{cases} -6x + 5y = 4 & \dots \\ 4x - 2y = 0 & \dots \end{cases}$$

$$\begin{array}{r} -12x + 10y = 8 \quad \dots \times 2 \\ +) 12x - 6y = 0 \quad \dots \times 3 \\ \hline 4y = 8 \\ y = 2 \end{array}$$

y = 2 を 式に代入して、

$$\begin{array}{r} 4x - 2 \times 2 = 0 \\ 4x = 4 \\ x = 1 \end{array}$$

$$\begin{cases} x = 1 \\ y = 2 \end{cases}$$