

連立方程式(代入法)

年 組 名前

/ 6

■ 次の連立方程式を解きなさい。

$$\textcircled{1} \begin{cases} 5x - y = 36 \\ x = -7y \end{cases}$$

$x =$, $y =$

$$\textcircled{2} \begin{cases} y = -x - 3 \\ x + 5y = -31 \end{cases}$$

$x =$, $y =$

$$\textcircled{3} \begin{cases} y = -4x \\ 5x + 2y = -3 \end{cases}$$

$x =$, $y =$

$$\textcircled{4} \begin{cases} 5x - 4y = -29 \\ y = -6x \end{cases}$$

$x =$, $y =$

$$\textcircled{5} \begin{cases} y = -x \\ 2x - 3y = -15 \end{cases}$$

$x =$, $y =$

$$\textcircled{6} \begin{cases} x - 3y = 0 \\ x = 4y - 2 \end{cases}$$

$x =$, $y =$

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■ 次の連立方程式を解きなさい。

$$\textcircled{1} \begin{cases} 5x - y = 36 & \dots\textcircled{1} \\ x = -7y & \dots\textcircled{2} \end{cases}$$

$$\begin{aligned} \textcircled{2} \text{ を } \textcircled{1} \text{ に代入して } & 5 \times (-7y) - 1 \times y = 36 \\ & -36y = 36 \\ & y = -1 \end{aligned}$$

$$\begin{aligned} y = -1 \text{ を } \textcircled{2} \text{ に代入して、} \\ x = 7 \end{aligned}$$

$$x = 7, y = -1$$

$$\textcircled{2} \begin{cases} y = -x - 3 & \dots\textcircled{1} \\ x + 5y = -31 & \dots\textcircled{2} \end{cases}$$

$$\begin{aligned} \textcircled{1} \text{ を } \textcircled{2} \text{ に代入して } & x + 5(-x - 3) = -31 \\ & -4x = -16 \\ & x = 4 \end{aligned}$$

$$\begin{aligned} x = 4 \text{ を } \textcircled{1} \text{ に代入して、} \\ y = -7 \end{aligned}$$

$$x = 4, y = -7$$

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

$$\begin{aligned} \textcircled{1} \text{ を } \textcircled{2} \text{ に代入して } & 5x + 2 \times (-4x) = -3 \\ & -3x = -3 \\ & x = 1 \end{aligned}$$

$$\begin{aligned} x = 1 \text{ を } \textcircled{1} \text{ に代入して、} \\ y = -4 \end{aligned}$$

$$x = 1, y = -4$$

$$\textcircled{4} \begin{cases} 5x - 4y = -29 & \dots\textcircled{1} \\ y = -6x & \dots\textcircled{2} \end{cases}$$

$$\begin{aligned} \textcircled{2} \text{ を } \textcircled{1} \text{ に代入して } & 5x - 4 \times (-6x) = -29 \\ & 29x = -29 \\ & x = -1 \end{aligned}$$

$$\begin{aligned} x = -1 \text{ を } \textcircled{2} \text{ に代入して、} \\ y = 6 \end{aligned}$$

$$x = -1, y = 6$$

$$\textcircled{5} \begin{cases} y = -x & \dots\textcircled{1} \\ 2x - 3y = -15 & \dots\textcircled{2} \end{cases}$$

$$\begin{aligned} \textcircled{1} \text{ を } \textcircled{2} \text{ に代入して } & 2x - 3 \times (-x) = -15 \\ & 5x = -15 \\ & x = -3 \end{aligned}$$

$$\begin{aligned} x = -3 \text{ を } \textcircled{1} \text{ に代入して、} \\ y = 3 \end{aligned}$$

$$x = -3, y = 3$$

$$\textcircled{6} \begin{cases} x - 3y = 0 & \dots\textcircled{1} \\ x = 4y - 2 & \dots\textcircled{2} \end{cases}$$

$$\begin{aligned} \textcircled{2} \text{ を } \textcircled{1} \text{ に代入して } & (4y - 2) - 3y = 0 \\ & y = 2 \end{aligned}$$

$$\begin{aligned} y = 2 \text{ を } \textcircled{2} \text{ に代入して、} \\ x = 6 \end{aligned}$$

$$x = 6, y = 2$$