

次の連立方程式を加減法で解きなさい。

$$(1) \begin{cases} 7x - 5y = 4 & \dots \textcircled{1} \\ -x - 3y = 18 & \dots \textcircled{2} \end{cases}$$

$(x, y) = ( \quad , \quad )$

$$(2) \begin{cases} 9x + y = 20 & \dots \textcircled{1} \\ 7x - 2y = 35 & \dots \textcircled{2} \end{cases}$$

$(x, y) = ( \quad , \quad )$

$$(3) \begin{cases} -5x - 8y = -19 & \dots \textcircled{1} \\ -2x - 9y = -25 & \dots \textcircled{2} \end{cases}$$

$(x, y) = ( \quad , \quad )$

$$(4) \begin{cases} 5x - 8y = -41 & \dots \textcircled{1} \\ 9x - 8y = -29 & \dots \textcircled{2} \end{cases}$$

$(x, y) = ( \quad , \quad )$

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

$(x, y) = ( \quad , \quad )$

# 解 答

$$\begin{array}{r} \textcircled{1} + \textcircled{2} \times 7 \\ (1) \quad \begin{array}{r} 7x - 5y = 4 \\ +) -7x - 21y = 126 \\ \hline -26y = 130 \end{array} \end{array}$$

$$y = -5$$

①に代入して

$$7x - 5 \times (-5) = 4 \qquad x = -3$$

$$(x, y) = (-3, -5)$$

$$\begin{array}{r} \textcircled{1} \times 2 + \textcircled{2} \\ (2) \quad \begin{array}{r} 18x + 2y = 40 \\ +) 7x - 2y = 35 \\ \hline 25x = 75 \end{array} \end{array}$$

$$x = 3$$

①に代入して

$$9 \times 3 + y = 20 \qquad y = -7$$

$$(x, y) = (3, -7)$$

$$\begin{array}{r} \textcircled{1} \times 2 - \textcircled{2} \times 5 \\ (3) \quad \begin{array}{r} -10x - 16y = -38 \\ -) -10x - 45y = -125 \\ \hline 29y = 87 \end{array} \end{array}$$

$$y = 3$$

①に代入して

$$-5x - 8 \times 3 = -19 \qquad x = -1$$

$$(x, y) = (-1, 3)$$

$$\begin{array}{r} \textcircled{1} - \textcircled{2} \\ (4) \quad \begin{array}{r} 5x - 8y = -41 \\ -) 9x - 8y = -29 \\ \hline -4x = -12 \end{array} \end{array}$$

$$x = 3$$

①に代入して

$$5 \times 3 - 8y = -41 \qquad y = 7$$

$$(x, y) = (3, 7)$$

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

$$x = -5$$

①に代入して

$$-5 + y = 1 \qquad y = 6$$

$$(x, y) = (-5, 6)$$