

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

$$\underline{(x, y) = (\quad , \quad)}$$

$$(2) \quad \begin{cases} -3x + 5y - 6 = 15 & \dots \textcircled{1} \\ -6x - 5y = -5x - 7y + 8 & \dots \textcircled{2} \end{cases}$$

$$\underline{(x, y) = (\quad , \quad)}$$

$$(3) \quad \begin{cases} -2x - (-5x + y) = 12 & \dots \textcircled{1} \\ 11x - 6y = 2(5x - 4y) + 18 & \dots \textcircled{2} \end{cases}$$

$$\underline{(x, y) = (\quad , \quad)}$$

$$(4) \quad \begin{cases} -0.1x - 0.7y = 7.5 & \dots \textcircled{1} \\ \frac{4}{5}x + \frac{3}{2}y = -19 & \dots \textcircled{2} \end{cases}$$

$$\underline{(x, y) = (\quad , \quad)}$$

解 答

(1) 整理して

$$\begin{cases} 4x - y = -3 & \dots\dots①' \\ 2x - y = 1 & \dots\dots②' \end{cases}$$

$$\begin{array}{r} \text{①}' - \text{②}' \\ 4x - y = -3 \\ -) \quad 2x - y = 1 \\ \hline 2x \qquad = -4 \\ x = -2 \end{array}$$

①に代入

$$4 \times (-2) - y = -3$$

$$y = -5$$

$$(x, y) = (-2, -5)$$

(2) 整理して

$$\begin{cases} -3x + 5y = 21 & \dots\dots①' \\ -x + 2y = 8 & \dots\dots②' \end{cases}$$

$$\begin{array}{r} \text{①}' - \text{②}' \times 3 \\ -3x + 5y = 21 \\ -) \quad -3x + 6y = 24 \\ \hline -y = -3 \\ y = 3 \end{array}$$

①に代入して

$$-3x + 5 \times 3 = 15$$

$$x = -2$$

$$(x, y) = (-2, 3)$$

(3) 整理して

$$\begin{cases} 3x - y = 12 & \dots\dots①' \\ x + 2y = 18 & \dots\dots②' \end{cases}$$

$$\begin{array}{r} \text{①}' \times 2 + \text{②}' \\ 6x - 2y = 24 \\ +) \quad x + 2y = 18 \\ \hline 7x \qquad = 42 \\ x = 6 \end{array}$$

①に代入

$$6 \times 6 - 2y = 24$$

$$y = 6$$

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

(4) 整理して

$$\begin{cases} -x - 7y = 75 & \dots\dots①' \\ 8x + 15y = -190 & \dots\dots②' \end{cases}$$

$$\begin{array}{r} \text{①}' \times 8 + \text{②}' \\ -8x - 56y = 600 \\ +) \quad 8x + 15y = -190 \\ \hline -41y = 410 \\ y = -10 \end{array}$$

①に代入

$$-8x - 56 \times (-10) = 600$$

$$x = -5$$

$$(x, y) = (-5, -10)$$