

解答

氏名

次の計算をなさい。

55 一ノ復反ト

$$\begin{aligned} 4x^2 + 5x - 2x^2 - 7x &= 2x^2 - 2x \\ 4x^2 + 5x - 2x^2 - 7x &= 2x^2 - 2x \\ 4x^2 + 5x - 2x^2 - 7x &= 2x^2 - 2x \end{aligned}$$

60 反復ノート

$$\begin{aligned} 3(-2x-5y) - 2(-2x+y) &= -6(2a-b) - 3(2b+4a) \\ &= -12a + 6b - 6b - 12a \\ &= -12a - 12a + \cancel{6b - 6b} \\ &= -24a \end{aligned}$$

61 一ト反復ノ一ト

$$\begin{aligned} & \frac{x-6y}{3} - \frac{x-2y}{2} \quad (6) \\ & = \frac{2(x-6y)}{6} - \frac{3(x-2y)}{6} \\ & = \frac{2(x-6y) - 3(x-2y)}{6} \\ & = \frac{2x - 12y - 3x + 6y}{6} \\ & = \frac{-x - 6y}{6} \end{aligned}$$

下反復ノ一ト62

$$\begin{aligned} & -(-a)^3 & (8) & (-2x)^2 \\ & -(-a) \times (-a) \times (-a) & & = (-2x) \times (-2x) \\ & a^3 & & = 4x^2 \end{aligned}$$

$$-(-a) \times (-a) \times (-a)$$

下反復ノ下 64

$$\begin{aligned} &= \frac{10x^2 \div 2x \times 5x}{5x^2 \times 5x} \quad (10) \\ &= \frac{10x}{25x^2} \\ &= \frac{5a \div 6b \times (-4b)}{5a \times 2 \times b} \\ &= -\frac{10}{3a} \end{aligned}$$

次の連立方程式を解きなさい。

一ト反復ノ一ト 68

$$\begin{aligned} & \left\{ \begin{array}{l} 3x + 2y = 6 \cdots \textcircled{1} \\ x - 2y = 10 \cdots \textcircled{2} \end{array} \right. \\ & \textcircled{2} \quad 4x = 16 \\ & \quad x = 4 \\ & \quad 4 \notin \textcircled{1} \rightarrow \text{入} \\ & \quad 12 + 2y = 6 \\ & \quad 2y = -6 \\ & \quad y = -3 \end{aligned}$$

$$(x, y) = (-3, 5) \quad (x, y) = (5, -1)$$

次の計算をなさい。

$$4x^2 + 5x - 2x^2 - 7x$$

$$\begin{aligned} &= 4x^2 - 2x^2 + 5x - 7x \\ &= 2x^2 - 2x \\ &= 20 - 50 - 36 + 50 - 8 - 7 \\ &= -30 - 15 \\ &[7x + 3y = -4 \dots \textcircled{2}] \\ &\textcircled{1} \times 3 \quad 9x + 6y = -18 \dots \textcircled{1}' \\ &\textcircled{2} \times 2 \quad 14x + 6y = -8 \dots \textcircled{2}' \\ &\textcircled{1}' - \textcircled{2}' \quad -5x = -10 \\ &\textcircled{1} \times 3 \quad 12x - 21y = 18 \dots \textcircled{1}' \\ &\textcircled{2} \times 4 \quad 12x - 32y = -4 \dots \textcircled{2}' \\ &\textcircled{1}' - \textcircled{2}' \quad 11y = 22 \end{aligned}$$

$x = 2$
 $y = 2$
 $x = 2$ を ① に代入
 $4x - 14 = 6$
 $4x = 20$
 $x = 5$
 $x = 2$ を ② に代入
 $6 + 2y = -6$
 $2y = -12$
 $y = -6$

$$\frac{x-6y}{3} - \frac{x-2y}{2}$$

(6) $\frac{4a-2b}{3} - \frac{3a+2b}{5}$

$$\begin{array}{r} 9x + 6y = -18 \\ -) 14x + 6y = -8 \\ \hline 9x + 6y = -18 \\ +) -14x - 6y = +8 \\ \hline -5x = -10 \end{array}$$

$(x, y) = (2, -6)$

6

$$\begin{aligned} &= \frac{2x - 12\cancel{y} - 3x + 6\cancel{y}}{6} = \frac{-x - 6\cancel{y}}{6} \\ &= \frac{-x - 16b}{15} \\ &= \frac{11a - 16b}{15} \end{aligned}$$

やり方教科書 P22

$$\begin{aligned} &-(-a)^3 \\ &-(-a) \times (-a) \times (-a) \\ &a^3 \end{aligned}$$
$$\begin{aligned} &(8) \quad (-2x)^2 \\ &= (-2x) \times (-2x) \\ &= 4x^2 \end{aligned}$$
$$\begin{aligned} (5) \quad &y = 2x \cdots \cdots ① \\ &\begin{cases} y = 2x \cdots \cdots ① \\ 3x + y = 10 \cdots ② \end{cases} \end{aligned}$$
$$\begin{aligned} &① \times ② \rightarrow 1 \times \cancel{y} \rightarrow \\ &3x + 2x = 10 \\ &5x = 10 \\ &x = 2 \end{aligned}$$
$$\begin{aligned} &x = 2 \text{ を } ① \rightarrow 1 \times \cancel{y} \rightarrow \\ &y = 4 \end{aligned}$$
$$\begin{aligned} (6) \quad &x + 4y = 1 \cdots ① \\ &\begin{cases} x + 4y = 1 \cdots ① \\ x = 5 - 2y \cdots ② \end{cases} \end{aligned}$$
$$\begin{aligned} &② \times ① \rightarrow 1 \times \cancel{y} \rightarrow \\ &(5 - 2\cancel{y}) + 4\cancel{y} = 1 \\ &5 - 2y + 4y = 1 \\ &2y = -4 \\ &y = -2 \end{aligned}$$
$$\begin{aligned} &y = -2 \text{ を } ② \rightarrow 1 \times \cancel{y} \rightarrow \\ &x = 5 - 2 \times (-2) \\ &= 5 + 4 \\ &= 9 \end{aligned}$$

[illegible]
$$= 25x^2$$

(7) $\begin{cases} \frac{x}{3} - \frac{y}{9} = 1 \dots \textcircled{1} \\ 5x - 2y = 12 \dots \textcircled{2} \end{cases}$

$10 \times \textcircled{1} \quad 9\left(\frac{x}{3} - \frac{y}{9}\right) = 9$

$\frac{9}{3}x - \frac{9}{9}y = 9$

$3x - y = 9 \dots \textcircled{1'}$

$\textcircled{1'} \times 2 \quad 6x - 2y = 18 \dots \textcircled{1''}$

$\textcircled{2} - \textcircled{1''} \quad -x = -6$

$x = 6$

$x = 6$ を $\textcircled{1}$ に代入

$18 - y = 9$

$-y = -9$

$y = 9$

(8) $\begin{cases} x + \frac{y}{3} = 1 \dots \textcircled{1} \\ x + y = 5 \dots \textcircled{2} \end{cases}$

$10 \times \textcircled{1} \quad 12\left(x + \frac{y}{3}\right) = 12$

$\frac{12}{x}x + \frac{12}{3}y = 12$

$3x + 4y = 12 \dots \textcircled{1'}$

$\textcircled{2} \times 3 \quad 3x + 3y = 15 \dots \textcircled{2'}$

$\textcircled{1'} - \textcircled{2'} \quad y = -3$

$y = -3$ を $\textcircled{2}$ に代入

$x - 3 = 5$

$x = 8$

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