

2年数学科 5月25日(月)4時間目 課題① 教科書P14、P15 解答

教科書P14

たしかめ4 : (1) $5x + 15y$ (2) $-6x + 12y + 9$

問5 : (1) $12x - 4y + 8$ (2) $14x - 21y$ (3) $2a - 3b$ (4) $2x + 3y - 5$

たしかめ5 : $3x - 5y$

問6 : (1) $-3a + 4b$ (2) $-3x^2 + x - 6$

教科書P15

問7 : (1) $5x - 7y$ (2) $6a + 10b$ (3) $-x - 8y$ (4) $3x^2 - 4$

問8 : $2x - 24y$

$$\begin{aligned} \text{途中式} \quad 3(2x - 4y) - 4(x + 3y) &= 6x - 12y - 4x - 12y \\ &= 6x - 4x - 12y - 12y \\ &= 2x - 24y \end{aligned}$$

問9 : (1) $\frac{9x}{10}$

$$\begin{aligned} \text{途中式} \quad \frac{7x - 4y}{10} + \frac{x + 2y}{5} &= \frac{7x - 4y}{10} + \frac{2(x + 2y)}{10} \\ &= \frac{7x - 4y + 2x + 4y}{10} \\ &= \frac{9x}{10} \end{aligned}$$

(2) $\frac{19x + y}{6}$

$$\begin{aligned} \text{途中式} \quad \frac{5x - y}{3} + \frac{3x + y}{2} &= \frac{2(5x - y)}{6} + \frac{3(3x + y)}{6} \\ &= \frac{10x - 2y + 9x + 3y}{6} \\ &= \frac{19x + y}{6} \end{aligned}$$

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

$$\begin{aligned} \text{途中式} \quad \frac{2a + b}{3} - \frac{a - 2b}{6} &= \frac{2(2a + b)}{6} - \frac{a - 2b}{6} \\ &= \frac{2(2a + b) - (a - 2b)}{6} \\ &= \frac{4a + 2b - a + 2b}{6} \\ &= \frac{3a + 4b}{6} \end{aligned}$$

(4) $\frac{2x + 9y}{3}$ もししくは $\frac{2x}{3} + 3y$

$$\begin{aligned} \text{途中式①} \quad x + y - \frac{x - 6y}{3} &= \frac{3x + 3y - (x - 6y)}{3} \\ &= \frac{3x + 3y - x + 6y}{3} \\ &= \frac{2x + 9y}{3} \end{aligned}$$

$$\begin{aligned} \text{途中式②} \quad x + y - \frac{x - 6y}{3} &= x + y - \left(\frac{x}{3} - \frac{6y}{3}\right) \\ &= x + y - \frac{x}{3} + 2y \\ &= x - \frac{x}{3} + y + 2y \\ &= \frac{3x}{3} - \frac{x}{3} + y + 2y \\ &= \frac{2x}{3} + 3y \end{aligned}$$