

多項式の計算①

1 解答 (1) $3x - 2y$ (2) $7a - 6b$

$$\begin{aligned}(1) \quad (x - 3y) + (2x + y) &= x - 3y + 2x + y \\ &= x + 2x - 3y + y \\ &= 3x - 2y\end{aligned}$$

$$\begin{aligned}(2) \quad (5a - 2b) + (2a - 4b) &= 5a - 2b + 2a - 4b \\ &= 5a + 2a - 2b - 4b \\ &= 7a - 6b\end{aligned}$$

2 解答 (1) $-2x + y$ (2) $2a + 3b$

$$\begin{aligned}(1) \quad (4x + 3y) - (6x + 2y) &= 4x + 3y - 6x - 2y \\ &= 4x - 6x + 3y - 2y \\ &= -2x + y\end{aligned}$$

$$\begin{aligned}(2) \quad (7a - 3b) - (5a - 6b) &= 7a - 3b - 5a + 6b \\ &= 7a - 5a - 3b + 6b \\ &= 2a + 3b\end{aligned}$$

3 解答 (1) $6x - 2y$ (2) $-5a - 10b$ (3) $6x - 3y + 15$

$$\begin{aligned}(1) \quad 2(3x - y) &= 2 \times 3x + 2 \times (-y) \\ &= 6x - 2y\end{aligned}$$

$$\begin{aligned}(2) \quad -5(a + 2b) &= (-5) \times a + (-5) \times 2b \\ &= -5a - 10b\end{aligned}$$

$$\begin{aligned}(3) \quad 3(2x - y + 5) &= 3 \times 2x + 3 \times (-y) + 3 \times 5 \\ &= 6x - 3y + 15\end{aligned}$$

4 解答 (1) $2x + 3y$ (2) $-3a + 2b - 1$

$$\begin{aligned}(1) \quad (4x + 6y) \div 2 &= (4x + 6y) \times \frac{1}{2} \\ &= 4x \times \frac{1}{2} + 6y \times \frac{1}{2} \\ &= 2x + 3y\end{aligned}$$

$$\begin{aligned}(2) \quad (15a - 10b + 5) \div (-5) &= (15a - 10b + 5) \times \left(-\frac{1}{5}\right) \\ &= 15a \times \left(-\frac{1}{5}\right) - 10b \times \left(-\frac{1}{5}\right) + 5 \times \left(-\frac{1}{5}\right) \\ &= -3a + 2b - 1\end{aligned}$$