

式の計算⑥ (解答と解説)

1 [解答] (1) 項の数 2, 項 $2a, -b$ (2) 項の数 3, 項 $3x^2, -4x, 1$

(1) $2a - b$ は, $2a + (-b)$ と書けるから

項の数は 2, 項は $2a, -b$

(2) $3x^2 - 4x + 1$ は, $3x^2 + (-4x) + 1$ と書けるから

項の数は 3, 項は $3x^2, -4x, 1$

2 [解答] (1) $-4x + 9y$ (2) $-4x - 2y$ (3) $7a^2 - a$ (4) $4a^2 - 15a$

(1) $2x + 8y - 6x + y = 2x - 6x + 8y + y$

$$= -4x + 9y$$

(2) $3x - 4y - 7x + 2y = 3x - 7x - 4y + 2y$

$$= -4x - 2y$$

(3) $4a^2 - 7a + 6a + 3a^2 = 4a^2 + 3a^2 - 7a + 6a$

$$= 7a^2 - a$$

(4) $a^2 - 6a - 9a + 3a^2 = a^2 + 3a^2 - 6a - 9a$

$$= 4a^2 - 15a$$

3 [解答] (1) $-2x + 3y$ (2) $2x + 3y$ (3) $6x$ (4) $-3x + 11y$ (5) $x - 2y$ (6) $\frac{9x + 7y}{12}$

(1) $(x - 2y) + (-3x + 5y) = x - 2y - 3x + 5y = x - 3x - 2y + 5y = 2x + 3y$

(2) $(5x - 4y) - (3x - 7y) = 5x - 4y - 3x + 7y = 5x - 3x - 4y + 7y = 2x + 3y$

(3) $3x^2 \times 4y \div 2xy = \frac{3x^2 \times 4y}{2xy} = 6x$

(4) $4(3x + 2y) - 3(5x - y) = 12x + 8y - 15x + 3y = 12x - 15x + 8y + 3y = -3x + 11y$

(5) $(7x - 4y) + 2(-3x + y) = 7x - 4y - 6x + 2y = 7x - 6x - 4y + 2y = x - 2y$

(6) $\frac{x + 3y}{4} + \frac{3x - y}{6} = \frac{3(x + 3y)}{4 \times 3} + \frac{2(3x - y)}{6 \times 2} = \frac{3x + 9y + 6x - 2y}{12} = \frac{9x + 7y}{12}$