



1. 次の計算をしなさい。

$$\begin{aligned} (1) \quad & 4x + 7y - 2x + 3y \\ &= (4x - 2x) + (7y + 3y) \\ &= 2x + 10y \end{aligned}$$

$$\begin{aligned} (2) \quad & 2x^2 + 3x - x^2 + 5x^2 - 4x \\ &= (2x^2 - x^2 + 5x^2) + (3x - 4x) \\ &= 6x^2 - x \end{aligned}$$

$$\begin{aligned} (3) \quad & 5x - \frac{1}{3}y - 3x^2 + 2x + \frac{1}{6}x^2 + \frac{1}{3}y \\ &= -3x^2 + \frac{1}{6}x^2 + 5x + 2x + \frac{1}{3}y - \frac{1}{3}y \\ &= -\frac{17}{6}x^2 + 7x \end{aligned}$$

$$\begin{aligned} (4) \quad & (-3m) \times (-4m) \\ &= 12m^2 \end{aligned}$$

$$\begin{aligned} (5) \quad & 9p \div (-3q) \\ &= \frac{9p}{-3q} = -\frac{3p}{q} \end{aligned}$$

$$\begin{aligned} (6) \quad & \frac{7}{4xy} \div \frac{5}{10xy} \\ &= \frac{7}{4xy} \times \frac{10xy}{5} = \frac{70}{20} = \frac{7}{2} \end{aligned}$$

$$\begin{aligned} (7) \quad & -3(-2n + 4 - 5) \\ &= 6n - 12 + 15 \\ &= 6n + 3 \end{aligned}$$

$$\begin{aligned} (8) \quad & (10a + 8b + 6c) \div 2 \\ &= \frac{10a}{2} + \frac{8b}{2} + \frac{6c}{2} = 5a + 4b + 3c \end{aligned}$$

$$\begin{aligned} (9) \quad & \left(\frac{3}{4}r - \frac{2}{5}s\right) \div \frac{1}{10} \\ &= \left(\frac{3}{4}r - \frac{2}{5}s\right) \times 10 = \frac{30}{4}r - \frac{20}{5}s \\ &= \frac{15}{2}r - 4s \end{aligned}$$

|                |                     |                             |
|----------------|---------------------|-----------------------------|
| (1) $2x + 10y$ | (2) $6x^2 - x$      | (3) $-\frac{17}{6}x^2 + 7x$ |
| (4) $12m^2$    | (5) $-\frac{3p}{q}$ | (6) $\frac{7}{2}$           |
| (7) $6n + 3$   | (8) $5a + 4b + 3c$  | (9) $\frac{15}{2}r - 4s$    |

2.  $a = -2$ ,  $b = 4$ のとき、次の式の値を求めなさい。

$$\begin{aligned} (1) \quad & 3(a + 2b) - 2(4a - b) \\ & 3a + 6b - 8a + 2b = -5a + 8b \\ & = -5(-2) + 8(4) = 10 + 32 = 42 \end{aligned}$$

$$\begin{aligned} (2) \quad & 9a^2b \div 3a \\ & \frac{9a^2b}{3a} = 3ab = 3(-2)(4) = -24 \end{aligned}$$

$$\begin{aligned} (3) \quad & 12a^2b \times (-2b) \div \frac{4}{3}ab \\ & \frac{12a^2b \times (-2b) \times 3}{4ab} = -18ab \\ & = -18(-2)(4) = -144 \end{aligned}$$

|        |         |         |
|--------|---------|---------|
| (1) 42 | (2) -24 | (3) -96 |
|--------|---------|---------|