

## 単項式の計算 (5)

【1】 (多項式の復習) 次の計算をなさい。

$$\begin{aligned} (1) \quad & 7(-2x+y)+4(3x-4y) \\ & = -14x+12x+7y-16y \\ & = -2x-9y \end{aligned}$$

$$\begin{aligned} (2) \quad & 3(2a-3b)-5(a-2b) \\ & = 6a-5a-9b+10b \\ & = a+b \end{aligned}$$

【2】 次の計算をなさい。

$$\begin{aligned} (1) \quad & (-4ac) \times (-2b) = (-4) \times (-2) \times a \times b \times c \\ & = 8abc \end{aligned}$$

$$\begin{aligned} (2) \quad & (-7xy) \times (-x)^2 = (-7) \times x \times x \times x \times y \\ & = -7x^3y \end{aligned}$$

$$\begin{aligned} (3) \quad & 16x^2y \div 8y = 16x^2y \times \frac{1}{8y} \\ & = 2x^2 \end{aligned}$$

$$\begin{aligned} (4) \quad & (-21a^2b^2) \div (-6ab) = (-21a^2b^2) \times \left(-\frac{1}{6ab}\right) \\ & = \frac{7}{2}ab \end{aligned}$$

$$\begin{aligned} (5) \quad & 9x^2y \div \left(-\frac{3}{4}x\right) = 9x^2y \times \left(-\frac{4}{3x}\right) \\ & = -12xy \end{aligned}$$

$$\begin{aligned} (6) \quad & \left(-\frac{4}{3}a^2b\right) \div \frac{7}{6}ab = \left(-\frac{4}{3}a^2b\right) \times \frac{6}{7ab} \\ & = -\frac{8}{7}a \end{aligned}$$

$$\begin{aligned} (7) \quad & 3a^4 \div \frac{3}{2}a^2 \div \frac{5}{4}a \\ & = 3a^4 \times \frac{2}{3a^2} \times \frac{4}{5a} \\ & = \frac{8}{5}a \end{aligned}$$

$$\begin{aligned} (8) \quad & \frac{9}{8}x \times \frac{2}{3}xy^2 \div \left(-\frac{1}{4}y\right) \\ & = \frac{9}{8}x \times \frac{2}{3}xy^2 \times \left(-\frac{4}{y}\right) \\ & = -3x^2y \end{aligned}$$

【3】  $x=4$ ,  $y=-6$  のとき, 次の式の値を求めなさい。

$$\begin{aligned} (1) \quad & 5(2x-3y)-7(x-2y) \\ & = 10x-7x-15y+14y \\ & = 3x-y \end{aligned}$$

$$\begin{aligned} (2) \quad & 3x^3y \times (-8y) \div (-6x^2y) = \frac{3x^3y \times (-8y)}{-6x^2y} \\ & = 4xy \end{aligned}$$

$$\begin{aligned} & 3x-y \text{ に値を代入して,} \\ & 3 \times 4 - (-6) = 18 \end{aligned}$$

$$\begin{aligned} & 4xy \text{ に値を代入して,} \\ & 4 \times 4 \times (-6) = -96 \end{aligned}$$

答え 18

答え -96