

## 単項式の計算 (3)

【1】 (多項式の復習) 次の計算をなさい。

$$\begin{aligned} (1) (6x-2y)-(x-7y) \\ = 6x-x-2y+7y \\ = 5x+5y \end{aligned}$$

$$\begin{aligned} (2) 2(3x-y)+4(-x+2y) \\ = 6x-4x-2y+8y \\ = 2x+6y \end{aligned}$$

【2】 次の計算をなさい。

$$\begin{aligned} (1) 7xy \times (-2y) &= 7 \times (-2) \times x \times y \times y \\ &= -14xy^2 \end{aligned}$$

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

$$\begin{aligned} (3) 12x^2 \div 6x &= 12x^2 \times \frac{1}{6x} \\ &= \frac{12 \times x \times x}{6 \times x} \\ &= 2x \end{aligned}$$

$$\begin{aligned} (4) 15a^2b \div \left(-\frac{5}{4}b\right) &= 15a^2b \times \left(-\frac{4}{5b}\right) \\ &= \frac{15 \times (-4) \times a \times a \times b}{5 \times b} \\ &= -12a^2 \end{aligned}$$

【3】 次の計算をなさい。

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

$$\begin{aligned} (2) 20a^2b^2 \div (-5b) \div 2ab &= \frac{20a^2b^2}{-5b \times 2ab} \\ &= \frac{20 \times a \times a \times b \times b}{(-5) \times 2 \times a \times b \times b} \\ &= -2a \end{aligned}$$

【4】  $x = -3$ ,  $y = 5$  のとき, 次の式の値を求めなさい。

$$\begin{aligned} (1) 3(5x+y)-4(2x+3y) \\ = 15x-8x+3y-12y \\ = 7x-9y \end{aligned}$$

$$\begin{aligned} (2) 6xy^2 \div 3xy \times 5x &= \frac{6xy^2 \times 5x}{3xy} \\ &= \frac{6 \times 5 \times x \times x \times y \times y}{3 \times x \times y} \\ &= 10xy \end{aligned}$$

$7x - 9y$  に値を代入して,

$$7 \times (-3) - 9 \times 5 = -66$$

$10xy$  に値を代入して,

$$10 \times (-3) \times 5 = -150$$

答え           -66          

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