

式の計算（単項式の乗法・除法②）

組 番 名前

1 次の計算をなさい。

$$\begin{aligned} \textcircled{1} \quad 2xy \div \frac{2}{5}x \\ &= 2xy \times \frac{5}{2x} \\ &= 5y \end{aligned}$$

$$\begin{aligned} \textcircled{2} \quad \frac{8}{7}ab \div (-4b) \\ &= \frac{8ab}{7} \times \left(-\frac{1}{4b}\right) \\ &= -\frac{2}{7}a \end{aligned}$$

$$\begin{aligned} \textcircled{3} \quad \frac{6}{5}xy \div \frac{3}{20}y \\ &= \frac{6xy}{5} \times \frac{20}{3y} \\ &= 8x \end{aligned}$$

$$\begin{aligned} \textcircled{4} \quad \left(-\frac{2}{3}x^2\right) \div \frac{1}{6}x \\ &= -\frac{2x^2}{3} \times \frac{6}{x} \\ &= -4x \end{aligned}$$

$$\begin{aligned} \textcircled{5} \quad \left(-\frac{1}{2}a^2b\right) \div \left(-\frac{1}{8}a\right) \\ &= -\frac{a^2b}{2} \times \left(-\frac{8}{a}\right) \\ &= 4ab \end{aligned}$$

$$\begin{aligned} \textcircled{6} \quad \frac{3}{4}a^2b^3 \div \left(-\frac{9}{10}ab\right) \\ &= \frac{3a^2b^3}{4} \times \left(-\frac{10}{9ab}\right) \\ &= -\frac{5}{6}ab^2 \end{aligned}$$

2 次の計算をなさい

$$\begin{aligned} \textcircled{1} \quad 9a^2b \times \left(-\frac{1}{3}ab\right) \\ &= -3a^3b^2 \end{aligned}$$

$$\begin{aligned} \textcircled{2} \quad (-3xy^2) \div 15y \\ &= -\frac{1}{5}xy \end{aligned}$$

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

$$\begin{aligned} \textcircled{4} \quad \left(-\frac{5}{6}xy^2\right) \div \left(-\frac{2}{3}xy\right) \\ &= -\frac{5xy^2}{6} \times \left(-\frac{3}{2xy}\right) \\ &= \frac{5}{4}y \end{aligned}$$

$$\begin{aligned} \textcircled{5} \quad (-x)^3 \times \left(-\frac{1}{2}y\right) \\ &= -x^3 \times \left(-\frac{1}{2}y\right) \\ &= \frac{1}{2}x^3y \end{aligned}$$

$$\begin{aligned} \textcircled{6} \quad \frac{4}{5}x^2y \div \left(-\frac{2}{5}xy^2\right) \\ &= \frac{4x^2y}{5} \times \left(-\frac{5}{2xy^2}\right) \\ &= -\frac{2x}{y} \end{aligned}$$

3 Aさんは $36x^2y \div 6xy \div 3x$ を下のように間違えて計算した。間違っている部分を○で囲み、正しい計算をなさい。

$$\begin{aligned} 36x^2y \div 6xy \div 3x \\ &= 36x^2y \div 2y \\ &= 18x^2 \end{aligned}$$

$$\left. \begin{aligned} &\text{正しい計算} \\ &\frac{36x^2y}{1} \times \frac{1}{6xy} \times \frac{1}{3x} \\ &= \frac{36x^2y}{6xy \times 3x} = 2 \end{aligned} \right\}$$