

チェックテスト

3A

単項式の乗法, 除法

得点

/ 100

1 次の計算をなさい。 ステップ 1

$$\begin{aligned} \textcircled{1} \quad 3a \times 5b \\ &= 3 \times a \times 5 \times b \\ &= 3 \times 5 \times a \times b \end{aligned}$$

$$\begin{aligned} \textcircled{3} \quad (-8x) \times \left(-\frac{1}{4}y\right) \\ &= -8 \times x \times \left(-\frac{1}{4}\right) \times y \\ &= -8 \times \left(-\frac{1}{4}\right) \times x \times y \end{aligned}$$

$$\begin{aligned} \textcircled{5} \quad 4a \times 3a^3 \\ &= 4 \times a \times 3 \times a^3 \\ &= 4 \times 3 \times a \times a^3 \end{aligned}$$

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

$$\begin{aligned} \textcircled{2} \quad (-2a) \times 4b \\ &= -2 \times a \times 4 \times b \\ &= -2 \times 4 \times a \times b \end{aligned}$$

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

$$\begin{aligned} \textcircled{6} \quad 2a^2 \times (-6ab) \\ &= 2 \times a^2 \times (-6) \times a \times b \\ &= 2 \times (-6) \times a^2 \times a \times b \end{aligned}$$

$$\begin{aligned} \textcircled{8} \quad \frac{3}{8}x \times (-2x)^3 \\ &= \frac{3}{8}x \times (-2x) \times (-2x) \times (-2x) \\ &= \frac{3}{8}x \times (-8x^3) \end{aligned}$$

2 次の計算をなさい。 ステップ 1

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

$$\begin{aligned} \textcircled{3} \quad (-3x)^2 \times (-5xy) \\ &= (-3x) \times (-3x) \times (-5xy) \\ &= 9x^2 \times (-5xy) \end{aligned}$$

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

$$\begin{aligned} \textcircled{4} \quad \left(-\frac{1}{2}xy\right)^2 \times 12x \\ &= \left(-\frac{1}{2}xy\right) \times \left(-\frac{1}{2}xy\right) \times 12x \\ &= \frac{1}{4}x^2y^2 \times 12x \end{aligned}$$

3 次の計算をなさい。 ステップ 2

$$\begin{aligned} \textcircled{1} \quad 8ab \div 2a \\ &= \frac{8ab}{2a} \end{aligned}$$

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

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

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

4 次の計算をなさい。 ステップ 3

$$\begin{aligned} \textcircled{1} \quad 8a^2 \times 3a \div 4a \\ &= \frac{8a^2 \times 3a}{4a} \end{aligned}$$

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

$$\begin{aligned} \textcircled{5} \quad (-4xy^2) \div 6x^2 \times \left(-\frac{3}{2}xy\right) \\ &= (-4xy^2) \times \frac{1}{6x^2} \times \left(-\frac{3xy}{2}\right) \\ &= \frac{4xy^2 \times 1 \times 3xy}{6x^2 \times 2} \end{aligned}$$

$$\begin{aligned} \textcircled{2} \quad 2a \times 9a^2 \div (-3a) \\ &= -\frac{2a \times 9a^2}{3a} \end{aligned}$$

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

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

5 次の計算をなさい。 ステップ 3

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

$$\begin{aligned} \textcircled{3} \quad \left(-\frac{2}{3}y\right)^2 \div 4xy \times (-18x) \\ &= \frac{4y^2}{9} \times \frac{1}{4xy} \times (-18x) = \frac{4y^2 \times 1 \times 18x}{9 \times 4xy} \end{aligned}$$

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

1 4点×8

$$\textcircled{1} \quad 15ab$$

$$\textcircled{2} \quad -8ab$$

$$\textcircled{3} \quad 2xy$$

$$\textcircled{4} \quad -\frac{5}{8}xy$$

$$\textcircled{5} \quad 12a^4$$

$$\textcircled{6} \quad -12a^3b$$

$$\textcircled{7} \quad 9x^2$$

$$\textcircled{8} \quad -3x^4$$

2 4点×4

$$\textcircled{1} \quad -6x^3y^2$$

$$\textcircled{2} \quad 4x^4y^3$$

$$\textcircled{3} \quad -45x^3y$$

$$\textcircled{4} \quad 3x^3y^2$$

3 4点×4

$$\textcircled{1} \quad 4b$$

$$\textcircled{2} \quad -4a$$

$$\textcircled{3} \quad -18x$$

$$\textcircled{4} \quad -6y$$

4 4点×6

$$\textcircled{1} \quad 6a^2$$

$$\textcircled{2} \quad -6a^2$$

$$\textcircled{3} \quad -2a^2b$$

$$\textcircled{4} \quad x$$

$$\textcircled{5} \quad y^3$$

$$\textcircled{6} \quad -xy$$

5 4点×3

$$\textcircled{1} \quad -9a^3$$

$$\textcircled{2} \quad -2a$$

$$\textcircled{3} \quad -2y$$