

# 確認問題

## 単項式と多項式の乗法，除法

32 次の計算をなさい。

ふりかえろう!

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$$\begin{aligned}
 (1) \quad & 3x(2y+5z) \\
 &= 3x \times 2y + 3x \times 5z \\
 &= \mathbf{6xy + 15xz}
 \end{aligned}$$

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

$$\begin{aligned}
 (3) \quad & (4x-5y) \times 7z \\
 &= 4x \times 7z + (-5y) \times 7z \\
 &= \mathbf{28xz - 35yz}
 \end{aligned}$$

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

$$\begin{aligned}
 (5) \quad & \frac{x}{5}(5x-10y) \\
 &= \frac{x \times 5x}{5} + \frac{x \times (-10y)}{5} \\
 &= \mathbf{x^2 - 2xy}
 \end{aligned}$$

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

33 次の計算をなさい。

ふりかえろう!

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$$\begin{aligned}
 (1) \quad & (12x^2-18x) \div 3x \quad \leftarrow \begin{array}{l} \text{逆数} \\ \text{←} \end{array} \\
 &= (12x^2-18x) \times \frac{1}{3x} \\
 &= \frac{12x^2}{3x} - \frac{18x}{3x} \\
 &= \mathbf{4x - 6}
 \end{aligned}$$

$$\begin{aligned}
 (2) \quad & (24x^2y+16xy) \div (-4xy) \quad \leftarrow \begin{array}{l} \text{逆数} \\ \text{←} \end{array} \\
 &= (24x^2y+16xy) \times \left(\frac{1}{-4xy}\right) \\
 &= \frac{24x^2y}{-4xy} + \frac{16xy}{-4xy} \\
 &= \mathbf{-6x - 4}
 \end{aligned}$$

$$\begin{aligned}
 (3) \quad & (3x^2+7xy) \div \left(-\frac{x}{3}\right) \\
 &= (3x^2+7xy) \div \left(\frac{-x}{3}\right) \quad \leftarrow \begin{array}{l} \text{逆数} \\ \text{←} \end{array} \\
 &= (3x^2+7xy) \times \left(\frac{3}{-x}\right) \\
 &= \frac{3x^2 \times 3}{-x} + \frac{7xy \times 3}{-x} \\
 &= \mathbf{-9x - 21y}
 \end{aligned}$$

$$\begin{aligned}
 (4) \quad & (8x^2-6xy) \div \frac{2}{3}x \\
 &= (8x^2-6xy) \div \frac{2x}{3} \quad \leftarrow \begin{array}{l} \text{逆数} \\ \text{←} \end{array} \\
 &= (8x^2-6xy) \times \frac{3}{2x} \\
 &= \frac{8x^2 \times 3}{2x} - \frac{6xy \times 3}{2x} \\
 &= \mathbf{12x - 9y}
 \end{aligned}$$