

80

式の乗法・除法

年 組 番 名前

● 例題 1 ●

次の計算をなさい。

$$\begin{aligned} (1) & 3x(x+5) \\ &= 3x \times x + 3x \times 5 \\ &= \underline{3x^2 + 15x} \end{aligned} \quad \rightarrow 71 \text{の例題2へ}$$

問1 次の計算をなさい。

$$\begin{aligned} (1) & x(x+4) \\ &= x \times x + x \times 4 \\ &= x^2 + 4x \\ & \quad \underline{\text{答. } x^2 + 4x} \end{aligned}$$

$$\begin{aligned} (2) & 2x(3x-4) \\ &= 2x \times 3x + 2x \times (-4) \\ &= 6x^2 - 8x \\ & \quad \underline{\text{答. } 6x^2 - 8x} \end{aligned}$$

$$\begin{aligned} (3) & -x(4x-5) \\ &= -x \times 4x - x \times (-5) \\ &= -4x^2 + 5x \\ & \quad \underline{\text{答. } -4x^2 + 5x} \end{aligned}$$

$$\begin{aligned} (4) & 3a(a^2-2a+1) \\ &= 3a \times a^2 + 3a \times (-2a) + 3a \times 1 \\ &= 3a^3 - 6a^2 + 3a \\ & \quad \underline{\text{答. } 3a^3 - 6a^2 + 3a} \end{aligned}$$

$$\begin{aligned} (5) & \frac{1}{2}x(4x+6y) \\ &= \frac{1}{2}x \times 4x + \frac{1}{2}x \times 6y \\ &= 2x^2 + 3xy \\ & \quad \underline{\text{答. } 2x^2 + 3xy} \end{aligned}$$

$$\begin{aligned} (6) & \frac{2}{3}x(6x^2-3x) \\ &= \frac{2}{3}x \times 6x^2 + \frac{2}{3}x \times (-3x) \\ &= 4x^3 - 2x^2 \\ & \quad \underline{\text{答. } 4x^3 - 2x^2} \end{aligned}$$

$$\begin{aligned} (7) & (3x+2) \times 4x \\ &= 3x \times 4x + 2 \times 4x \\ &= 12x^2 + 8x \\ & \quad \underline{\text{答. } 12x^2 + 8x} \end{aligned}$$

$$\begin{aligned} (8) & (2x-5y) \times (-2y) \\ &= 2x \times (-2y) - 5y \times (-2y) \\ &= -4xy + 10y^2 \\ & \quad \underline{\text{答. } -4xy + 10y^2} \end{aligned}$$

$$\begin{aligned} (9) & (-4x+1) \times 3x \\ &= -4x \times 3x + 1 \times 3x \\ &= -12x^2 + 3x \\ & \quad \underline{\text{答. } -12x^2 + 3x} \end{aligned}$$

$$\begin{aligned} (10) & (8x-12) \times \frac{3}{4}x \\ &= 8x \times \frac{3}{4}x - 12 \times \frac{3}{4}x \\ &= 6x^2 - 9x \\ & \quad \underline{\text{答. } 6x^2 - 9x} \end{aligned}$$

● 例題 2 ●

次の計算をなさい。

$$\begin{aligned} (1) & (a^2+6a) \div a \\ &= \frac{a^2}{a} + \frac{6a}{a} \\ &= \underline{a+6} \end{aligned} \quad \rightarrow 71 \text{の例題3へ}$$

問2 次の計算をなさい。

$$\begin{aligned} (1) & (9x^2+6x) \div 3x \\ &= \frac{9xx}{3x} + \frac{6x}{3x} \\ &= 3x+2 \\ & \quad \underline{\text{答. } 3x+2} \end{aligned}$$

$$\begin{aligned} (2) & (16xy-4y) \div 4y \\ &= \frac{16xy}{4y} - \frac{4y}{4y} \\ &= 4x-1 \\ & \quad \underline{\text{答. } 4x-1} \end{aligned}$$

$$\begin{aligned} (3) & (6x^2-12xy) \div \frac{3}{2}x \\ &= (6x^2-12xy) \times \frac{2}{3x} \\ &= 6x^2 \times \frac{2}{3x} - 12xy \times \frac{2}{3x} \\ &= 4x-8y \\ & \quad \underline{\text{答. } 4x-8y} \end{aligned}$$

$$\begin{aligned} (4) & (-3ab+6b) \div \left(-\frac{b}{3}\right) \\ &= (-3ab+6b) \times \left(-\frac{3}{b}\right) \\ &= -3ab \times \left(-\frac{3}{b}\right) + 6b \times \left(-\frac{3}{b}\right) \\ &= 9a-18 \\ & \quad \underline{\text{答. } 9a-18} \end{aligned}$$