

1章(多項式) 1節(多項式の計算)

3 . (x + a)(x + b)の展開

年 組 番

名前

1. 次の式を展開しなさい。

$$(x + 6)(x - 4)$$

$$\begin{aligned} &= x^2 + (6 - 4)x + 6 \times (-4) \\ &= x^2 + 2x - 24 \end{aligned}$$

$$(x - 8)(x + 7)$$

$$\begin{aligned} &= x^2 + (-8 + 7)x + (-8) \times 7 \\ &= x^2 - x - 56 \end{aligned}$$

$$(x + 5)(x + 1)$$

$$\begin{aligned} &= x^2 + (5 + 1)x + 5 \times 1 \\ &= x^2 + 6x + 5 \end{aligned}$$

$$(x - 3)(x - 4)$$

$$\begin{aligned} &= x^2 + (-3 - 4)x + (-3) \times (-4) \\ &= x^2 - 7x + 12 \end{aligned}$$

$$(x + 2)(x + 3)$$

$$\begin{aligned} &= x^2 + (2 + 3)x + 2 \times 3 \\ &= x^2 + 5x + 6 \end{aligned}$$

$$(x - 5)(x + 1)$$

$$\begin{aligned} &= x^2 + (-5 + 1)x + (-5) \times 1 \\ &= x^2 - 4x - 5 \end{aligned}$$

$$(x - 2)(x - 3)$$

$$\begin{aligned} &= x^2 + (-2 - 3)x + (-2) \times (-3) \\ &= x^2 - 5x + 6 \end{aligned}$$

$$(x + 3)(x - 2)$$

$$\begin{aligned} &= x^2 + (3 - 2)x + 3 \times (-2) \\ &= x^2 + x - 6 \end{aligned}$$

$$(y - 7)(y - 4)$$

$$\begin{aligned} &= y^2 + (-7 - 4)y + (-7) \times (-4) \\ &= y^2 - 11y + 28 \end{aligned}$$

$$(y - 5)(y - 2)$$

$$\begin{aligned} &= y^2 + (-5 - 2)y + (-5) \times (-2) \\ &= y^2 - 7y + 10 \end{aligned}$$

$$\left(x + \frac{1}{2}\right)\left(x - \frac{1}{3}\right)$$

$$= x^2 + \left(\frac{1}{2} - \frac{1}{3}\right)x + \frac{1}{2} \times \left(-\frac{1}{3}\right)$$

$$= x^2 + \frac{1}{6}x - \frac{1}{6}$$

$$(x + 1)(x + 1)$$

$$\begin{aligned} &= x^2 + (1 + 1)x + 1 \times 1 \\ &= x^2 + 2x + 1 \end{aligned}$$