

## 式の展開と加法、減法

NO.1

名前

/6 点

■ 次の式を簡単にしなさい。

①  $(x + 4)^2 - (x - 2)(x + 8)$

②  $(x - 5)(x - 3) + x(x - 4)$

③  $(x - 6)(x + 4) + (x - 7)(x - 2)$

④  $(x - 8)(x + 6) - (x - 4)^2$

⑤  $(x - 3)(x + 3) + 2(x + 6)(x - 4)$

⑥  $2(x + 4)^2 - (x - 5)^2$

## 解答

$$\begin{aligned} \textcircled{1} \quad & x^2 + 8x + 16 - (x^2 + 6x - 16) \\ &= x^2 + 8x + 16 - x^2 - 6x + 16 \\ &= 2x + 32 \end{aligned}$$

$$\begin{aligned} \textcircled{2} \quad & x^2 - 8x + 15 + x^2 - 4x \\ &= 2x^2 - 12x + 15 \end{aligned}$$

$$\begin{aligned} \textcircled{3} \quad & x^2 - 2x - 24 + x^2 - 9x + 14 \\ &= 2x^2 - 11x - 10 \end{aligned}$$

$$\begin{aligned} \textcircled{4} \quad & x^2 - 2x - 48 - (x^2 - 8x + 16) \\ &= x^2 - 2x - 48 - x^2 + 8x - 16 \\ &= 6x - 64 \end{aligned}$$

$$\begin{aligned} \textcircled{5} \quad & x^2 - 9 + 2(x^2 + 2x - 24) \\ &= x^2 - 9 + 2x^2 + 4x - 48 \\ &= 3x^2 + 4x - 57 \end{aligned}$$

$$\begin{aligned} \textcircled{6} \quad & 2(x^2 + 8x + 16) - (x^2 - 10x + 25) \\ &= 2x^2 + 16x + 32 - x^2 + 10x - 25 \\ &= x^2 + 26x + 7 \end{aligned}$$