

因数分解④

組 番 名前

1 次の式を因数分解しなさい。

$$\begin{aligned} \textcircled{1} \quad x^2 + 2x - 3 \\ = (x+3)(x-1) \end{aligned}$$

$$\begin{aligned} \textcircled{2} \quad x^2 + 3x - 10 \\ = (x+5)(x-2) \end{aligned}$$

$$\begin{aligned} \textcircled{3} \quad x^2 + 5x - 36 \\ = (x+9)(x-4) \end{aligned}$$

$$\begin{aligned} \textcircled{4} \quad x^2 + 5x - 24 \\ = (x+8)(x-3) \end{aligned}$$

$$\begin{aligned} \textcircled{5} \quad x^2 + x - 12 \\ = (x+4)(x-3) \end{aligned}$$

$$\begin{aligned} \textcircled{6} \quad x^2 + 14x - 32 \\ = (x+16)(x-2) \end{aligned}$$

$$\begin{aligned} \textcircled{7} \quad x^2 - 6x - 7 \\ = (x-7)(x+1) \end{aligned}$$

$$\begin{aligned} \textcircled{8} \quad x^2 - 2x - 15 \\ = (x-5)(x+3) \end{aligned}$$

$$\begin{aligned} \textcircled{9} \quad x^2 - 9x - 36 \\ = (x-12)(x+3) \end{aligned}$$

2 次の式を因数分解しなさい。

$$\begin{aligned} \textcircled{1} \quad 4x^2 + 16x + 16 \\ = 4(x^2 + 4x + 4) \\ = 4(x+2)^2 \end{aligned}$$

$$\begin{aligned} \textcircled{2} \quad ab^2 - 36a \\ = a(b^2 - 36) \\ = a(b+6)(b-6) \end{aligned}$$

$$\begin{aligned} \textcircled{3} \quad -2ax^2 + 16ax - 32a \\ = -2a(x^2 - 8x + 16) \\ = -2a(x-4)^2 \end{aligned}$$

$$\begin{aligned} \textcircled{3} \quad 4x^2y - 8xy - 12y \\ = 4y(x^2 - 2x - 3) \\ = 4y(x-3)(x+1) \end{aligned}$$

$$\begin{aligned} \textcircled{5} \quad x^3y - xy \\ = xy(x^2 - 1) \\ = xy(x+1)(x-1) \end{aligned}$$

$$\begin{aligned} \textcircled{6} \quad (a+1)^2 + (a+1) - 6 \\ = A^2 + A - 6 \\ = (A+3)(A-2) \\ = (a+1+3)(a+1-2) \\ = (a+4)(a-1) \end{aligned}$$

$$\begin{aligned} \textcircled{7} \quad (x-3)(x+4) - 2(x-2)^2 \\ = x^2 + x - 12 - 2x^2 + 8x - 8 \\ = -x^2 + 9x - 20 \\ = -(x^2 - 9x + 20) \\ = -(x-5)(x-4) \end{aligned}$$