

年 組 番 名前

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次の式を、因数分解しなさい。

$$\begin{aligned} [1] & (x+y)^2 - 4(x+y) + 4 \\ & x+y=A \text{ とおく} \\ & = A^2 - 4A + 4 \\ & = (A+2)^2 \\ & = (x+y-2)^2 \end{aligned}$$

$$\begin{aligned} [2] & 4(a-b)^2 - 9 \\ & a-b=A \text{ とおく} \\ & = 4A^2 - 9 \\ & = (2A)^2 - 3^2 \\ & = (2A+3)(2A-3) \\ & = \{2(a-b)+3\}\{2(a-b)-3\} \\ & = (2a-2b+3)(2a-2b-3) \end{aligned}$$

$$\begin{aligned} [3] & (x+y)^2 + 3(x+y) \\ & x+y=A \text{ とおく} \\ & = A^2 + 3A \\ & = A(A+3) \\ & = (x+y)(x+y+3) \end{aligned}$$

$$\begin{aligned} [4] & (b+c)^2 - (b+c) - 12 \\ & b+c=A \text{ とおく} \\ & = A^2 - A - 12 \\ & = (A+3)(A-4) \\ & = (b+c+3)(b+c-4) \end{aligned}$$