

氏名 ( ) 点数 \_\_\_\_\_

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

$$\begin{aligned}(2) \quad & 2ax^2 - 8ax - 10a \\ & = 2a(x^2 - 4x - 5) \\ & = \underline{2a(x-5)(x+1)}\end{aligned}$$

$$\begin{aligned}(3) \quad & 2x^2 - 6xy - 8y^2 \\ & = 2(x^2 - 3xy - 4y^2) \\ & = \underline{2(x-4y)(x+y)}\end{aligned}$$

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

$$\begin{aligned}(5) \quad & 4x^3 - 8x^2 - 12x \\ & = 4x(x^2 - 2x - 3) \\ & = \underline{4x(x-3)(x+1)}\end{aligned}$$

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

$$\begin{aligned}(7) \quad & (x+y)^2 - 2(x+y) - 8 \\ & \rightarrow x+y=A \text{ とおく} \\ & = A^2 - 2A - 8 \\ & = (A-4)(A+2) \\ & = \underline{(x+y-4)(x+y+2)}\end{aligned}$$

$$\begin{aligned}(8) \quad & (x+y)^2 + 6(x+y) + 9 \\ & \rightarrow x+y=A \text{ とおく} \\ & = A^2 + 6A + 9 \\ & = (A+3)^2 \\ & = \underline{(x+y+3)^2}\end{aligned}$$

$$\begin{aligned}(9) \quad & (x-y)^2 - 16 \\ & \rightarrow x-y=A \text{ とおく} \\ & = A^2 - 16 \\ & = (A+4)(A-4) \\ & = \underline{(x-y+4)(x-y-4)}\end{aligned}$$

$$\begin{aligned}(10) \quad & (x-3)^2 - 5(x-3) - 14 \\ & \rightarrow x-3=A \text{ とおく} \\ & = A^2 - 5A - 14 \\ & = (A-7)(A+2) \\ & = (x-3-7)(x-3+2) \\ & = \underline{(x-10)(x-1)}\end{aligned}$$