

## 因数分解 発展（20問） 版Hの答え

※ 答えの中に、まだ分解できる因数が残っていないかを確認してください。

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$$\begin{aligned}(1) \quad & x^4 - 25x^2 + 144 \\ & = (x - 4)(x - 3)(x + 3)(x + 4)\end{aligned}$$

$$\begin{aligned}(2) \quad & (x + y)^2 + 4(x + y) + 3 \\ & = (x + y + 1)(x + y + 3)\end{aligned}$$

$$\begin{aligned}(3) \quad & x^2 - 4xy + 3y^2 - 7x + 15y + 12 \\ & = (x - 3y - 3)(x - y - 4)\end{aligned}$$

$$\begin{aligned}(4) \quad & x^2 - xy - 2y^2 - 2x + 10y - 8 \\ & = (x - 2y + 2)(x + y - 4)\end{aligned}$$

$$\begin{aligned}(5) \quad & x^2 - y^2 + 6y - 9 \\ & = (x - y + 3)(x + y - 3)\end{aligned}$$

$$\begin{aligned}(6) \quad & x^4 - 5x^2 + 4 \\ & = (x - 2)(x - 1)(x + 1)(x + 2)\end{aligned}$$

$$\begin{aligned}(7) \quad & x^4 - 34x^2 + 225 \\ & = (x - 5)(x - 3)(x + 3)(x + 5)\end{aligned}$$

$$\begin{aligned}(8) \quad & 12x^2 + 32x + 20 \\ & = 4(x + 1)(3x + 5)\end{aligned}$$

$$\begin{aligned}(9) \quad & x^2 - y^2 + 12y - 36 \\ & = (x - y + 6)(x + y - 6)\end{aligned}$$

$$\begin{aligned}(10) \quad & (x + y)^2 - (x + y) - 12 \\ & = (x + y - 4)(x + y + 3)\end{aligned}$$

$$\begin{aligned}(11) \quad & x^2 - 3xy + 2y^2 - 6x + 11y + 5 \\ & = (x - 2y - 1)(x - y - 5)\end{aligned}$$

$$\begin{aligned}(12) \quad & (x + y)^2 - 2(x + y) - 35 \\ & = (x + y - 7)(x + y + 5)\end{aligned}$$

$$\begin{aligned}(13) \quad & 15x^2 - 5x - 70 \\ & = 5(x + 2)(3x - 7)\end{aligned}$$

$$\begin{aligned}(14) \quad & 12x^2 - 3 \\ & = 3(2x - 1)(2x + 1)\end{aligned}$$

$$\begin{aligned}(15) \quad & (x + y)^2 - (x + y) - 42 \\ & = (x + y - 7)(x + y + 6)\end{aligned}$$

$$\begin{aligned}(16) \quad & x^2 - y^2 + 4y - 4 \\ & = (x - y + 2)(x + y - 2)\end{aligned}$$

$$\begin{aligned}(17) \quad & x^4 - 8x^2 - 9 \\ & = (x - 3)(x + 3)(x^2 + 1)\end{aligned}$$

$$\begin{aligned}(18) \quad & x^2 - 9y^2 + x + 27y - 20 \\ & = (x - 3y + 5)(x + 3y - 4)\end{aligned}$$

$$\begin{aligned}(19) \quad & x^2 - y^2 + 8y - 16 \\ & = (x - y + 4)(x + y - 4)\end{aligned}$$

$$\begin{aligned}(20) \quad & 4x^2 + 14x - 30 \\ & = 2(x + 5)(2x - 3)\end{aligned}$$