

式の展開 3項・工夫（20問） 版Iの答え

※ 置き換えの問題は、 $x + y$ を1つの文字と見て展開したかを見てください。

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

$$\begin{aligned}(2) \quad & (x - 3y + 1)^2 \\ & = x^2 - 6xy + 9y^2 + 2x - 6y + 1\end{aligned}$$

$$\begin{aligned}(3) \quad & (x + 4)(x - 4)(x^2 + 16) \\ & = x^4 - 256\end{aligned}$$

$$\begin{aligned}(4) \quad & (x + y + 3)(x + y - 7) \\ & = x^2 + 2xy + y^2 - 4x - 4y - 21\end{aligned}$$

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

$$\begin{aligned}(6) \quad & (x + 3)(x - 4)(x - 5) \\ & = x^3 - 6x^2 - 7x + 60\end{aligned}$$

$$\begin{aligned}(7) \quad & (x + 1)(x - 1)(x^2 + 1) \\ & = x^4 - 1\end{aligned}$$

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

$$\begin{aligned}(9) \quad & (x + 2)(x + 3)(x + 4) \\ & = x^3 + 9x^2 + 26x + 24\end{aligned}$$

$$\begin{aligned}(10) \quad & (x + y + 5)^2 \\ & = x^2 + 2xy + y^2 + 10x + 10y + 25\end{aligned}$$

$$\begin{aligned}(11) \quad & (x + 2)(x - 4)(x + 5) \\ & = x^3 + 3x^2 - 18x - 40\end{aligned}$$

$$\begin{aligned}(12) \quad & (x + y - 6)(x + y - 2) \\ & = x^2 + 2xy + y^2 - 8x - 8y + 12\end{aligned}$$

$$\begin{aligned}(13) \quad & (x^2 + 3x + 1)(x^2 - 3x + 1) \\ & = x^4 - 7x^2 + 1\end{aligned}$$

$$\begin{aligned}(14) \quad & (x^2 + 4x + 2)(x^2 - 4x + 2) \\ & = x^4 - 12x^2 + 4\end{aligned}$$

$$\begin{aligned}(15) \quad & (x + 3y + 1)^2 \\ & = x^2 + 6xy + 9y^2 + 2x + 6y + 1\end{aligned}$$

$$\begin{aligned}(16) \quad & (x + y + 5)(x + y - 3) \\ & = x^2 + 2xy + y^2 + 2x + 2y - 15\end{aligned}$$

$$\begin{aligned}(17) \quad & (x + 2)(x - 4)(x + 4) \\ & = x^3 + 2x^2 - 16x - 32\end{aligned}$$

$$\begin{aligned}(18) \quad & (x + 3)(x - 3)(x^2 + 9) \\ & = x^4 - 81\end{aligned}$$

$$\begin{aligned}(19) \quad & (x - y - 1)^2 \\ & = x^2 - 2xy + y^2 - 2x + 2y + 1\end{aligned}$$

$$\begin{aligned}(20) \quad & (x - 3y + 5)^2 \\ & = x^2 - 6xy + 9y^2 + 10x - 30y + 25\end{aligned}$$