

式の展開 3項・工夫（20問） 版E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。

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

$$\begin{aligned}(2) & (x^2 + 2x - 3)(x^2 - 2x - 3) \\ & = x^4 - 10x^2 + 9\end{aligned}$$

$$\begin{aligned}(3) & (x + y - 1)(x + y - 6) \\ & = x^2 + 2xy + y^2 - 7x - 7y + 6\end{aligned}$$

$$\begin{aligned}(4) & (x + y + 5)(x + y + 2) \\ & = x^2 + 2xy + y^2 + 7x + 7y + 10\end{aligned}$$

$$\begin{aligned}(5) & (x^2 + 3x - 2)(x^2 - 3x - 2) \\ & = x^4 - 13x^2 + 4\end{aligned}$$

$$\begin{aligned}(6) & (x - 1)(x + 3)(x - 4) \\ & = x^3 - 2x^2 - 11x + 12\end{aligned}$$

$$\begin{aligned}(7) & (x - 2y - 3)^2 \\ & = x^2 - 4xy + 4y^2 - 6x + 12y + 9\end{aligned}$$

$$\begin{aligned}(8) & (x + 4)(x + 5)(x - 5) \\ & = x^3 + 4x^2 - 25x - 100\end{aligned}$$

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

$$\begin{aligned}(10) & (x - 3y - 3)^2 \\ & = x^2 - 6xy + 9y^2 - 6x + 18y + 9\end{aligned}$$

$$\begin{aligned}(11) & (x - 2y - 5)^2 \\ & = x^2 - 4xy + 4y^2 - 10x + 20y + 25\end{aligned}$$

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

$$\begin{aligned}(13) & (x + 2)(x - 2)(x^2 + 4) \\ & = x^4 - 16\end{aligned}$$

$$\begin{aligned}(14) & (x + 3)(x - 3)(x^2 + 9) \\ & = x^4 - 81\end{aligned}$$

$$\begin{aligned}(15) & (x - 1)(x - 3)(x + 4) \\ & = x^3 - 13x + 12\end{aligned}$$

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

$$\begin{aligned}(17) & (x + y + 1)(x + y - 1) \\ & = x^2 + 2xy + y^2 - 1\end{aligned}$$

$$\begin{aligned}(18) & (x - 3y + 2)^2 \\ & = x^2 - 6xy + 9y^2 + 4x - 12y + 4\end{aligned}$$

$$\begin{aligned}(19) & (x + y + 4)(x + y + 5) \\ & = x^2 + 2xy + y^2 + 9x + 9y + 20\end{aligned}$$

$$\begin{aligned}(20) & (x + 2)(x - 3)(x - 4) \\ & = x^3 - 5x^2 - 2x + 24\end{aligned}$$