

■ 次の式を因数分解しなさい。

① $4x^2+16x+15$

$$\begin{array}{r} \times \quad \rightarrow \\ \times \quad \rightarrow \\ \hline 4 \quad 15 \quad 16 \end{array} \quad \boxed{}$$

② $9x^2+9x-4$

③ $2x^2+7x-4$

④ $2x^2-9x+9$

⑤ $3x^2+10x-25$

⑥ $12x^2+5x-2$

⑦ $12x^2+17x+6$

⑧ $16x^2-25$

⑨ $12x^2-x-1$

⑩ $5x^2+17x+6$

⑪ $10x^2-27x+5$

⑫ $12x^2+29x+15$

■ 次の式を因数分解しなさい。

① $4x^2+16x+15$

$$\begin{array}{r} 2 \quad 3 \rightarrow 6 \\ \times \\ 2 \quad 5 \rightarrow 10 \\ \hline 4 \quad 15 \quad 15 \end{array} \quad (2x+3)(2x+5)$$

② $9x^2+9x-4$

$$\begin{array}{r} 3 \quad -1 \rightarrow -3 \\ \times \\ 3 \quad 4 \rightarrow 12 \\ \hline 9 \quad -4 \quad 9 \end{array} \quad (3x-1)(3x+4)$$

③ $2x^2+7x-4$

$$\begin{array}{r} 1 \quad 4 \rightarrow 8 \\ \times \\ 2 \quad -1 \rightarrow -2 \\ \hline 2 \quad -4 \quad 7 \end{array} \quad (x+4)(2x-1)$$

④ $2x^2-9x+9$

$$\begin{array}{r} 1 \quad -3 \rightarrow -6 \\ \times \\ 2 \quad -3 \rightarrow -6 \\ \hline 2 \quad 9 \quad -9 \end{array} \quad (x-3)(2x-3)$$

⑤ $3x^2+10x-25$

$$\begin{array}{r} 1 \quad 5 \rightarrow 15 \\ \times \\ 3 \quad -5 \rightarrow -15 \\ \hline 3 \quad -25 \quad 10 \end{array} \quad (x+5)(3x-5)$$

⑥ $12x^2+5x-2$

$$\begin{array}{r} 3 \quad 2 \rightarrow 8 \\ \times \\ 4 \quad -1 \rightarrow -4 \\ \hline 12 \quad -2 \quad 5 \end{array} \quad (3x+2)(4x-1)$$

⑦ $12x^2+17x+6$

$$\begin{array}{r} 4 \quad 3 \rightarrow 9 \\ \times \\ 3 \quad 2 \rightarrow 8 \\ \hline 12 \quad 6 \quad 17 \end{array} \quad (4x+3)(3x+2)$$

⑧ $16x^2-25$

$$\begin{array}{r} 4 \quad -5 \rightarrow -20 \\ \times \\ 4 \quad 5 \rightarrow 20 \\ \hline 16 \quad -25 \quad 0 \end{array} \quad (4x-5)(4x+5)$$

⑨ $12x^2-x-1$

$$\begin{array}{r} 4 \quad 1 \rightarrow 3 \\ \times \\ 3 \quad -1 \rightarrow -3 \\ \hline 12 \quad -1 \quad -1 \end{array} \quad (4x+1)(3x-1)$$

⑩ $5x^2+17x+6$

$$\begin{array}{r} 1 \quad 3 \rightarrow 15 \\ \times \\ 5 \quad 2 \rightarrow 10 \\ \hline 5 \quad 6 \quad 17 \end{array} \quad (x+3)(5x+2)$$

⑪ $10x^2-27x+5$

$$\begin{array}{r} 2 \quad -5 \rightarrow -10 \\ \times \\ 5 \quad -1 \rightarrow -5 \\ \hline 10 \quad 5 \quad -27 \end{array} \quad (2x-5)(5x-1)$$

⑫ $12x^2+29x+15$

$$\begin{array}{r} 3 \quad 5 \rightarrow 15 \\ \times \\ 4 \quad 3 \rightarrow 12 \\ \hline 12 \quad 15 \quad 29 \end{array} \quad (3x+5)(4x+3)$$