

■ 次の式を因数分解しなさい。

① $4x^2+19x-5$

\times	→	
\times	→	
4	-5	19

② $16x^2-9$

③ $10x^2+13x-3$

④ $2x^2-3x-5$

⑤ $3x^2+2x-1$

⑥ $12x^2+23x+5$

⑦ $15x^2+4x-4$

⑧ $4x^2+4x-3$

⑨ $6x^2+23x+20$

⑩ $9x^2-9x+2$

⑪ $4x^2+17x+15$

⑫ $2x^2-5x+2$

■ 次の式を因数分解しなさい。

① $4x^2+19x-5$

$$\begin{array}{r} 1 \quad \times \quad 5 \rightarrow 20 \\ 4 \quad \times \quad -1 \rightarrow -1 \\ \hline 4 \quad -5 \quad 19 \end{array} \quad \boxed{(x+5)(4x-1)}$$

② $16x^2-9$

$$\begin{array}{r} 4 \quad \times \quad 3 \rightarrow 12 \\ 4 \quad \times \quad -3 \rightarrow -12 \\ \hline 16 \quad -9 \quad 0 \end{array} \quad \boxed{(4x+3)(4x-3)}$$

③ $10x^2+13x-3$

$$\begin{array}{r} 2 \quad \times \quad 3 \rightarrow 15 \\ 5 \quad \times \quad -1 \rightarrow -2 \\ \hline 10 \quad -3 \quad 13 \end{array} \quad \boxed{(2x+3)(5x-1)}$$

④ $2x^2-3x-5$

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

⑤ $3x^2+2x-1$

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

⑥ $12x^2+23x+5$

$$\begin{array}{r} 4 \quad \times \quad 1 \rightarrow 3 \\ 3 \quad \times \quad 5 \rightarrow 20 \\ \hline 12 \quad 5 \quad 23 \end{array} \quad \boxed{(4x+1)(3x+5)}$$

⑦ $15x^2+4x-4$

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

⑧ $4x^2+4x-3$

$$\begin{array}{r} 2 \quad \times \quad -1 \rightarrow -2 \\ 2 \quad \times \quad 3 \rightarrow 6 \\ \hline 4 \quad -3 \quad 4 \end{array} \quad \boxed{(2x-1)(2x+3)}$$

⑨ $6x^2+23x+20$

$$\begin{array}{r} 2 \quad \times \quad 5 \rightarrow 15 \\ 3 \quad \times \quad 4 \rightarrow 8 \\ \hline 6 \quad 20 \quad 23 \end{array} \quad \boxed{(2x+5)(3x+4)}$$

⑩ $9x^2-9x+2$

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

⑪ $4x^2+17x+15$

$$\begin{array}{r} 1 \quad \times \quad 3 \rightarrow 12 \\ 4 \quad \times \quad 5 \rightarrow 5 \\ \hline 4 \quad 15 \quad 17 \end{array} \quad \boxed{(x+3)(4x+5)}$$

⑫ $2x^2-5x+2$

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