

1 次の式を因数分解しなさい。

(1) $2x^2 + 5x + 2$

[解]

$$\begin{array}{r} 2 \qquad 2 \\ 1 \times 2 \longrightarrow 4 \\ 2 \times 1 \longrightarrow \frac{1}{5} \end{array}$$

$$2x^2 + 5x + 2 = (x+2)(2x+1)$$

(2) $3x^2 - x - 2$

[解]

$$\begin{array}{r} 3 \qquad -2 \\ 1 \times -1 \longrightarrow -3 \\ 3 \times 2 \longrightarrow \frac{2}{-1} \end{array}$$

$$3x^2 - x - 2 = (x-1)(3x+2)$$

(3) $5x^2 + 2x - 3$

[解]

$$\begin{array}{r} 5 \qquad -3 \\ 1 \times 1 \longrightarrow 5 \\ 5 \times -3 \longrightarrow \frac{-3}{2} \end{array}$$

$$5x^2 + 2x - 3 = (x+1)(5x-3)$$

(4) $7x^2 - 12x + 5$

[解]

$$\begin{array}{r} 7 \qquad 5 \\ 1 \times -1 \longrightarrow -7 \\ 7 \times -5 \longrightarrow \frac{-5}{-12} \end{array}$$

$$7x^2 - 12x + 5 = (x-1)(7x-5)$$

2 次の式を因数分解しなさい。

(1) $3x^2 + x - 4$

[解]

$$\begin{array}{r} 3 \qquad -4 \\ 1 \times -1 \longrightarrow -3 \\ 3 \times 4 \longrightarrow \frac{4}{1} \end{array}$$

$$3x^2 + x - 4 = (x-1)(3x+4)$$

(2) $2x^2 - 9x + 9$

[解]

$$\begin{array}{r} 2 \qquad 9 \\ 1 \times -3 \longrightarrow -6 \\ 2 \times -3 \longrightarrow \frac{-3}{-9} \end{array}$$

$$2x^2 - 9x + 9 = (x-3)(2x-3)$$

(3) $6x^2 - 11x + 3$

[解]

$$\begin{array}{r} 6 \qquad 3 \\ 2 \times -3 \longrightarrow -9 \\ 3 \times -1 \longrightarrow \frac{-2}{-11} \end{array}$$

$$6x^2 - 11x + 3 = (2x-3)(3x-1)$$

(4) $4x^2 - 8x - 5$

[解]

$$\begin{array}{r} 4 \qquad -5 \\ 2 \times 1 \longrightarrow 2 \\ 2 \times -5 \longrightarrow \frac{-10}{-8} \end{array}$$

$$4x^2 - 8x - 5 = (2x+1)(2x-5)$$