

次の式を因数分解しなさい。

$$\begin{array}{r} 1 \\ 2 \end{array} \times \begin{array}{r} 3 \\ 1 \end{array}$$

(1) $2x^2 + 7xy + 3y^2$

$$\underline{(x+3y)(2x+y)}$$

(2) $3x^2 - 7xy - 6y^2$

$$\begin{array}{r} 1 \\ 3 \end{array} \times \begin{array}{r} -3 \\ 2 \end{array} \rightarrow \begin{array}{r} -9 \\ 2 \end{array}$$

$$\underline{(x-3y)(3x+2y)}$$

(3) $6x^2 - 13xy + 5y^2$

$$\begin{array}{r} 2 \\ 3 \end{array} \times \begin{array}{r} -1 \\ -5 \end{array} \rightarrow \begin{array}{r} -3 \\ -10 \end{array}$$

$$\underline{(2x-y)(3x-5y)}$$

(4) $6x^2 - 23x - 4$

$$\begin{array}{r} 1 \\ 6 \end{array} \times \begin{array}{r} -4 \\ 1 \end{array} \rightarrow \begin{array}{r} -24 \\ 1 \end{array}$$

$$\underline{(x-4)(6x+1)}$$

(5) $6x^2 + 16x - 6$

$$\begin{array}{r} 1 \\ 3 \end{array} \times \begin{array}{r} 3 \\ -1 \end{array} \rightarrow \begin{array}{r} 9 \\ -1 \end{array}$$

$$= 2(3x^2 + 8x - 3)$$

$$= \underline{2(x+3)(3x-1)}$$