

解説

練習 2 3

$$(1) \quad 3x^2 + 7x + 2 = (x + 2)(3x + 1)$$

$$(2) \quad 2x^2 + 9x + 10 = (x + 2)(2x + 5)$$

$$(3) \quad 2x^2 - 7x + 6 = (x - 2)(2x - 3)$$

$$(4) \quad 4x^2 + 8x - 21 = (2x - 3)(2x + 7)$$

$$(5) \quad 6x^2 - 13x - 15 = (x - 3)(6x + 5)$$

$$(6) \quad 2y^2 - 11y + 12 = (y - 4)(2y - 3)$$

$$(7) \quad 3x^2 + 5ax - 2a^2 = (x + 2a)(3x - a)$$

$$(8) \quad 6x^2 - 7ax - 3a^2 = (2x - 3a)(3x + a)$$

$$(9) \quad 4x^2 + 13xy - 35y^2 = (x + 5y)(4x - 7y)$$

解説

練習 2 4 (1) $x - y = A$ とおく。

$$\begin{aligned} (x - y)^2 - 5(x - y) + 6 &= A^2 - 5A + 6 = (A - 2)(A - 3) \\ &= \{(x - y) - 2\}\{(x - y) - 3\} \\ &= (x - y - 2)(x - y - 3) \end{aligned}$$

(2) $x + y = A$ とおく。

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