

1 次の設問に答えよ.

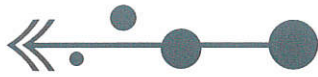
(1) $(3x - y)(x + y)$ を展開せよ.

(2) $(2x + y - z)(2x - y + z)$ を展開せよ.

(3) $2x^2 + 5xy - 3y^2$ を因数分解せよ.

(4) $2x^2 + 3xy + y^2 + 7x + 4y + 3$ を因数分解せよ.

(旭川大学 2016)



2016年保健福祉(2期)第2問



2 次の設問に答えよ.

- (1) $(3x - y)(x + y)$ を展開せよ.
 (2) $(2x + y - z)(2x - y + z)$ を展開せよ.
 (3) $2x^2 + 5xy - 3y^2$ を因数分解せよ.
 (4) $2x^2 + 3xy + y^2 + 7x + 4y + 3$ を因数分解せよ.

$$(1) (\text{与式}) = \underline{3x^2 + 2xy - y^2} //$$

$$\begin{aligned} (2) (\text{与式}) &= \{2x + (y - z)\} \{2x - (y - z)\} \\ &= 4x^2 - (y - z)^2 \\ &= \underline{4x^2 - y^2 + 2yz - z^2} // \end{aligned}$$

$$(3) (\text{与式}) = \underline{(2x - y)(x + 3y)} // \quad \begin{array}{l} 2 \\ 1 \end{array} \times \begin{array}{l} -1 \\ 3 \end{array}$$

$$\begin{aligned} (4) (\text{与式}) &= y^2 + (3x + 4)y + 2x^2 + 7x + 3 \\ &= y^2 + (3x + 4)y + (2x + 1)(x + 3) \\ &= \underline{(y + 2x + 1)(y + x + 3)} // \end{aligned} \quad \begin{array}{l} 2 \\ 1 \end{array} \times \begin{array}{l} 1 \\ 3 \end{array}$$