



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.

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

$$(2) (\text{与式}) = \{2x + (y - z)\} \{2x - (y - z)\}$$

$$= 4x^2 - (y - z)^2$$

$$= \underline{4x^2 - y^2 + 2yz - z^2} //$$

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

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

$$(4) (\text{与式}) = y^2 + (3x + 4)y + 2x^2 + 7x + 3$$

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

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

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