

EXERCICE 1 - Développer en utilisant l'identité remarquable qui convient :

|                        |                  |                        |
|------------------------|------------------|------------------------|
| $A = (x + 4)^2$        | $B = (2 - x)^2$  | $C = (x + 1)(x - 1)$   |
| $D = (2x + 1)^2$       | $E = (3x - 2)^2$ | $F = (7x + 5)^2$       |
| $G = (5x + 6)(5x - 6)$ | $H = (4x - 8)^2$ | $I = (3x + 4)(3x + 4)$ |
| $J = (3 + x)(x - 3)$   | $K = (2x + 9)^2$ | $L = (11x - 12)^2$     |

EXERCICE 2 - Développer puis réduire :

|                                                                                              |                                    |
|----------------------------------------------------------------------------------------------|------------------------------------|
| $Z = (x + 2)^2 + (3 - 2x)(3 + 2x)$<br>$Z = x^2 + 4x + 4 + 9 - 4x^2$<br>$Z = -3x^2 + 4x + 13$ | $A = (x + 1)^2 + (x - 3)^2$        |
| $B = (3 - x)^2 + (x + 5)^2$                                                                  | $C = (x - 2)^2 + (x + 4)(x - 4)$   |
| $D = (x + 1)(x - 1) + (x + 4)^2$                                                             | $E = (x - 5)^2 + (2x + 7)(2x - 7)$ |

EXERCICE 3 - Développer puis réduire :

|                                                                                                                               |                                    |
|-------------------------------------------------------------------------------------------------------------------------------|------------------------------------|
| $Z = (x + 2)^2 - (3 - 2x)(3 + 2x)$<br>$Z = x^2 + 4x + 4 - (9 - 4x^2)$<br>$Z = x^2 + 4x + 4 - 9 + 4x^2$<br>$Z = 5x^2 + 4x - 5$ | $A = (2x + 1)^2 - (x + 3)^2$       |
| $B = (2x + 3)^2 - (x - 7)(x + 7)$                                                                                             | $C = (x + 2)(x - 2) - (x - 3)^2$   |
| $D = (x - 5)^2 - (2x - 7)(x - 5)$                                                                                             | $E = (3x + 1)(x - 2) - (2x - 3)^2$ |