

Corrigés Savoir Cd. 2

Corrigé Exercice 6

$$1) A_1 = (x + 5)^2$$

$$A_1 = x^2 + 2 \times 5x + 25$$

$$A_1 = x^2 + 10x + 25$$

$$A_2 = (3 + x)^2$$

$$A_2 = 9 + 2 \times 3x + x^2$$

$$A_2 = 9 + 6x + x^2$$

$$A_3 = (3x + 4)^2$$

$$A_3 = 9x^2 + 2 \times 12x + 16$$

$$A_3 = 9x^2 + 24x + 16$$

$$A_4 = (7 + 5x)^2$$

$$A_4 = 49 + 2 \times 35x + 25x^2$$

$$A_4 = 49 + 70x + 25x^2$$

$$2) B_1 = (x - 8)^2$$

$$B_1 = x^2 - 2 \times 8x + 64$$

$$B_1 = x^2 - 16x + 64$$

$$B_2 = (3 - x)^2$$

$$B_2 = 9 - 2 \times 3x + x^2$$

$$B_2 = 9 - 6x + x^2$$

$$B_3 = (2x - 5)^2$$

$$B_3 = 4x^2 - 2 \times 10x + 25$$

$$B_3 = 4x^2 - 20x + 25$$

$$B_4 = (6 - 4x)^2$$

$$B_4 = 36 - 2 \times 24x + 16x^2$$

$$B_4 = 36 - 48x + 16x^2$$

$$3) C_1 = (x + 3)(x - 3)$$

$$C_1 = x^2 - 9$$

$$C_2 = (7 - x)(7 + x)$$

$$C_2 = 49 - x^2$$

$$C_3 = (5x + 1)(5x - 1)$$

$$C_3 = 25x^2 - 1$$

$$C_4 = (2 + 4x)(-2 + 4x)$$

$$C_4 = -4 + 16x^2$$

$$4) D_1 = (6x - 2)^2$$

$$D_1 = 36x^2 - 2 \times 12x + 4$$

$$D_1 = 36x^2 - 24x + 4$$

$$D_2 = (4 - 3x)(4 + 3x)$$

$$D_2 = 16 - 9x^2$$

$$D_3 = (1 + 9x)^2$$

$$D_3 = 1 + 2 \times 9x + 81x^2$$

$$D_3 = 1 + 18x + 81x^2$$

$$D_4 = (-5 + 2x)(2x + 5)$$

$$D_4 = -25 + 4x^2$$

Corrigé Exercice 7*

$$D_3 = (n^2 + 1)(n^2 - 1)$$

$$D_3 = n^4 - n^2 + n^2 - 1$$

$$D_3 = n^4 - 1$$

$$D_5 = (3x - 2y)^2$$

$$D_5 = 9x^2 - 2 \times 6xy + 4y^2$$

$$D_5 = 9x^2 - 12xy + 4y^2$$

$$D_7 = (a + b)^3$$

$$D_7 = (a + b)^2(a + b)$$

$$D_7 = (a^2 + 2ab + b^2)(a + b)$$

$$D_7 = a^3 + a^2b + 2a^2b + 2ab^2 + ab^2 + b^3$$

$$D_7 = a^3 + 3a^2b + 3ab^2 + b^3$$

$$D_9 = (a + b + c)^2 = ((a + b) + c)^2$$

$$D_9 = (a + b)^2 + 2(a + b) \times c + c^2$$

$$D_9 = a^2 + 2ab + b^2 + 2ac + 2bc + c^2$$

$$D_9 = a^2 + b^2 + c^2 + 2ab + 2ac + 2bc$$