

Exercice 24 p.91 :

$$A = (y + 6)^2$$

$$A = y^2 + 2 \times y \times 6 + 6^2$$

$$\boxed{A = y^2 + 12y + 36}$$

$$B = (7 + y)^2$$

$$B = 7^2 + 2 \times 7 \times y + y^2$$

$$\boxed{B = 49 + 14y + y^2}$$

$$C = (6y + 5)^2$$

$$C = (6y)^2 + 2 \times 6y \times 5 + 5^2$$

$$\boxed{C = 36y^2 + 60y + 25}$$

$$D = (10y + 3)^2$$

$$D = (10y)^2 + 2 \times 10y \times 3 + 3^2$$

$$\boxed{D = 100y^2 + 60y + 9}$$

$$E = (4 + 3y)^2$$

$$E = 4^2 + 2 \times 4 \times 3y + (3y)^2$$

$$\boxed{E = 16 + 24y + 9y^2}$$

$$F = (y^2 + 3)^2$$

$$F = (y^2)^2 + 2 \times y^2 \times 3 + 3^2$$

$$\boxed{F = y^4 + 6y^2 + 9}$$

Exercice 26 p.91 :

$$A = (x - 2)^2$$

$$A = x^2 - 2 \times x \times 2 + 2^2$$

$$\boxed{A = x^2 - 4x + 4}$$

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

$$B = 5^2 - 2 \times 5 \times x + x^2$$

$$\boxed{B = 25 - 10x + x^2}$$

$$C = (6x - 1)^2$$

$$C = (6x)^2 - 2 \times 6x \times 1 + 1^2$$

$$\boxed{C = 36x^2 - 12x + 1}$$

$$D = (4x - 3)^2$$

$$D = (4x)^2 - 2 \times 4x \times 3 + 3^2$$

$$\boxed{D = 16x^2 - 24x + 9}$$

$$E = (3x - 7)^2$$

$$E = (3x)^2 - 2 \times 3x \times 7 + 7^2$$

$$\boxed{E = 9x^2 - 42x + 49}$$

$$F = (10 - 3x)^2$$

$$F = 10^2 - 2 \times 10 \times 3x + (3x)^2$$

$$\boxed{F = 100 - 60x^2 + 9x^2}$$

Exercice 55 p.92 :

$$A = (t + 6)(t - 6)$$

$$A = t^2 - 6^2$$

$$\boxed{A = t^2 - 36}$$

$$B = (5 - 2t)(5 + 2t)$$

$$B = 5^2 - (2t)^2$$

$$\boxed{B = 25 - 4t^2}$$

$$C = (3t + 10)(3t - 10)$$

$$C = (3t)^2 - 10^2$$

$$\boxed{C = 9t^2 - 100}$$

$$D = (t^2 + 1)(t^2 - 1)$$

$$D = (t^2)^2 - 1^2$$

$$\boxed{D = t^4 - 1}$$

Exercice 17 p.90 :

$$A = (3x - 4)(-x + 9) + (7x + 2)(3x - 4)$$

$$A = (3x - 4)[(-x + 9) + (7x + 2)]$$

$$A = (3x - 4)(-x + 9 + 7x + 2)$$

$$\boxed{A = (3x - 4)(6x + 11)}$$

$$B = (4 - x)(3x + 5) - (4 - x)(-x - 2)$$

$$B = (4 - x)[(3x + 5) - (-x - 2)]$$

$$B = (4 - x)(3x + 5 + x + 2)$$

$$\boxed{B = (4 - x)(4x + 7)}$$

$$C = (4x - 1)^2 - (x + 6)(4x - 1)$$

$$C = (4x - 1)(4x - 1) - (x + 6)(4x - 1)$$

$$C = (4x - 1)[(4x - 1) - (x + 6)]$$

$$C = (4x - 1)(4x - 1 - x - 6)$$

$$\boxed{C = (4x - 1)(3x - 7)}$$

$$D = 3(x - 5)(2x + 1) + (6x - 7)(2x + 1)$$

$$D = (2x + 1)[3(x - 5) + (6x - 7)]$$

$$D = (2x + 1)(3x - 15 + 6x - 7)$$

$$\boxed{D = (2x + 1)(9x - 22)}$$

Exercice 18 p.90 :

$$A = (-2x + 3)(5x + 3) + (-2x + 3)(-x + 4)$$

$$A = (-2x + 3)[(5x + 3) + (-x + 4)]$$

$$A = (-2x + 3)(5x + 3 - x + 4)$$

$$\boxed{A = (-2x + 3)(4x + 7)}$$

$$B = (4x - 3)(7 - 3x) + (4x - 3)^2$$

$$B = (4x - 3)(7 - 3x) + (4x - 3)(4x - 3)$$

$$B = (4x - 3)[(7 - 3x) + (4x - 3)]$$

$$B = (4x - 3)(7 - 3x + 4x - 3)$$

$$\boxed{B = (4x - 3)(x + 4)}$$

$$C = (9x - 2)(-x + 6) - (2x + 5)(9x - 2)$$

$$C = (9x - 2)[(-x + 6) - (2x + 5)]$$

$$C = (9x - 2)(-x + 6 - 2x - 5)$$

$$\boxed{C = (9x - 2)(-3x + 1)}$$

$$D = 7x(6x + 1) - 2(x + 1)(6x + 1)$$

$$D = (6x + 1)[7x - 2(x + 1)]$$

$$D = (6x + 1)(7x - 2x - 2)$$

$$\boxed{D = (6x + 1)(5x - 2)}$$