

Exercice 1 : Corrigé

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

$$A = 8(x+2)$$

$$B = x^2 - 9$$

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

$$C = (x-3)(2x+1) + (x-3)(3x-5)$$

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

$$C = (x-3)(5x-4)$$

Exercice 2 : Corrigé

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

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

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

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

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

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

$$= x(x+5-3x-6)$$

$$B = x(-2x-1)$$

$$C = (x+1)(-x+3) - 5(x+1)(x+2)$$

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

$$= (x+1)(-x+3-5x-10)$$

$$C = (x+1)(-6x-7)$$

$$D = (2x+1)^2 - (2x+1)(3x-2)$$

$$= (2x+1)[(2x+1) - (3x-2)]$$

$$= (2x+1)(2x+1-3x+2)$$

$$D = (2x+1)(-x+3)$$

$$E = x^2 - 9 + (x-3)(2x+5)$$

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

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

$$E = (x-3)(3x+8)$$

$$F = (x+2)(x+5) + (2x+4)(x-6)$$

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

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

$$= (x+2)(x+5+2x-12)$$

$$F = (x+2)(3x-7)$$

Exercice 3 : Corrigé

$$A = (x+1)^2 + (2x+2)(-3x+5)$$

$$= (x+1)^2 + 2(x+1)(-3x+5)$$

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

$$= (x+1)(x+1-6x+10)$$

$$A = (x+1)(-5x+11)$$

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

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

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

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