



Exercice n°1 : Factorise les expressions suivantes :

$$A = (3x+2)(x+1) + (3x+2)(4x-7)$$

$$A = (3x+2)[(x+1) + (4x-7)]$$

$$A = (3x+2)[x+1+4x-7]$$

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

$$B = (4x+1)(2x-5) - (2x+1)(x-3)$$

$$B = (4x+1)[(2x-5) - (x-3)]$$

$$B = (4x+1)[2x-5-x+3]$$

$$B = (4x+1)(x-2)$$

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

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

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

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

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

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

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

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

$$D = (x-3)(2x-6)$$

Exercice n°2 : Complète :

$$a^2 - 2ab + b^2 = (a-b)^2 \quad ; \quad a^2 - b^2 = (a-b)(a+b) \quad ; \quad a^2 + 2ab + b^2 = (a+b)^2$$

Exercice n°3 : Factorise à l'aide des identités remarquables.

$$E = 49x^2 - 25 = (7x-5)(7x+5)$$

$$F = x^2 + 6x + 9 = (x+3)^2$$

$$G = x^2 - 18x + 81 = (x-9)^2$$

$$H = 25x^2 + 90x + 81 = (5x+9)^2$$



Classes de 3^o

CORRIGE C.R. N° 7 VERSION 2

Exercice n°1 : Factorise les expressions suivantes :

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

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

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

$$A = (x+2)(6x+4)$$

$$B = (2x+1)(x+4) - (2x+1)(2x-5)$$

$$B = (2x+1)[(x+4) - (2x-5)]$$

$$B = (2x+1)[x+4-2x+5]$$

$$B = (2x+1)(-x+9)$$

$$C = (x+4)^2 + 2(x+4)(2x-3)$$

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

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

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

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

$$D = (7x-3)(5x-2) - (7x-3)$$

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

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

$$D = (7x-3)(5x-3)$$

Exercice n°2 : Complète :

$$a^2 + 2ab + b^2 = (a+b)^2 \quad ; \quad a^2 - b^2 = (a-b)(a+b) \quad ; \quad a^2 - 2ab + b^2 = (a-b)^2$$

Exercice n°3 : Factorise à l'aide des identités remarquables.

$$E = 64x^2 - 16 = (8x - 4)(8x + 4)$$

$$F = x^2 - 4x + 4 = (x - 2)^2$$

$$G = x^2 + 14x + 49 = (x + 7)^2$$

$$H = 9x^2 + 30x + 25 = (3x + 5)^2$$