

Groupe des Instituts Excel

Exercices

Exercice 1

Factoriser les expressions suivantes.

$$A = (-10x - 8)^2 - 16$$

$$B = (3x + 6)(-7x + 9) + (-7x + 9)^2$$

$$C = -(4x - 1)(-8x - 7) + (4x - 1)$$

$$D = -(-10x + 5)(8x + 7) + (-8x - 10)(-10x + 5)$$

$$E = 100x^2 - 100$$

$$F = 25x^2 - 49 - (5x - 7)(6x + 1)$$

Exercice 2

Factoriser les expressions suivantes.

$$A = (-6x + 1)^2 - 25$$

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

$$C = 64x^2 - 9$$

$$D = -(2x + 1) + (2x + 1)(-8x + 10)$$

$$E = (7x + 3)(-2x - 7) - (2x - 6)(-2x - 7)$$

$$F = 100x^2 - 36 + (8x - 1)(10x + 6)$$

Exercice 3

Factoriser les expressions suivantes.

$$A = 16x^2 - 4$$

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

$$C = (7x + 10)^2 - 49$$

$$D = (9x + 10) - (-x - 1)(9x + 10)$$

$$E = (x + 1)(4x - 2) - (5x - 7)(x + 1)$$

$$F = 100x^2 - 49 + (3x + 9)(10x + 7)$$

Exercice 4

Factoriser les expressions suivantes.

$$A = -(8x + 1)(-5x - 7) - (7x - 9)(8x + 1)$$

$$B = (3x + 6)^2 - 4$$

$$C = -(-6x + 3)(4x + 9) + 16x^2 - 81$$

$$D = 25x^2 - 64$$

$$E = -(-2x - 4) + (-2x - 4)(-8x - 4)$$

$$F = -(9x + 3)(10x + 7) + (10x + 7)^2$$

Exercice 5

Factoriser les expressions suivantes.

$$A = (6x - 1)(7x + 7) + 36x^2 - 1$$

$$B = (6x + 4) + (6x + 4)(5x + 4)$$

$$C = x^2 - 81$$

$$D = (-2x + 3)(9x - 2) - (-10x - 7)(9x - 2)$$

$$E = (-4x + 6)^2 - (-4x + 6)(4x + 3)$$

$$F = (-4x - 8)^2 - 25$$

Exercice 6

Factoriser les expressions suivantes.

$$A = (6x - 3)^2 - 4$$

$$B = 49x^2 - 100 - (7x + 10)(9x - 8)$$

$$C = (7x - 1)(3x + 1) + (7x - 1)(3x - 5)$$

$$D = -(-5x + 8) - (-5x - 6)(-5x + 8)$$

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

$$F = (x - 5)(-3x + 10) + (-3x + 10)^2$$