

Groupe des Instituts Excel

Exercices

Exercice 1

Factoriser les expressions suivantes.

$$A = (-10x + 6)^2 + (-5x + 2)(-10x + 6)$$

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

$$C = (-8x - 1)(x - 1) - (-8x - 1)$$

$$D = 36x^2 - 36$$

$$E = (9x - 8)(3x - 10) + (-9x - 2)(9x - 8)$$

$$F = -(2x - 4)(6x + 2) + 4x^2 - 16$$

Exercice 2

Factoriser les expressions suivantes.

$$A = -(3x + 5) + (3x - 8)(3x + 5)$$

$$B = 100x^2 - 81 - (10x + 9)(2x - 10)$$

$$C = 100x^2 - 36$$

$$D = 81 - (5x - 1)^2$$

$$E = (8x - 3)(-7x - 7) + (-7x - 7)^2$$

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

Exercice 3

Factoriser les expressions suivantes.

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

$$B = (9x - 7)(-10x + 1) + (-10x + 1)(-10x + 1)$$

$$C = 4x^2 - 36 - (2x + 6)(-3x - 9)$$

$$D = 49x^2 - 36$$

$$E = (10x - 7) - (10x - 6)(10x - 7)$$

$$F = (-2x - 10)^2 + (-2x - 10)(9x - 4)$$

Exercice 4

Factoriser les expressions suivantes.

$$A = x^2 - 36$$

$$B = (-8x + 9)(-7x + 6) - (x - 6)(-8x + 9)$$

$$C = -(7x + 4)(-5x + 9) + (-5x + 9)^2$$

$$D = 16 - (3x + 7)^2$$

$$E = -(6x - 4)(6x + 6) - (6x + 6)$$

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

Exercice 5

Factoriser les expressions suivantes.

$$A = -(-9x + 10)(4x - 3) - (4x - 3)$$

$$B = 64x^2 - 36$$

$$C = -(-8x + 8)(6x + 2) + (-8x + 8)(9x - 6)$$

$$D = (3x + 8)(-x + 4) + 9x^2 - 64$$

$$E = (-7x - 9)^2 - 49$$

$$F = (-9x + 1)^2 + (-9x + 1)(-5x + 7)$$

Exercice 6

Factoriser les expressions suivantes.

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

$$B = (-x - 5)^2 - 25$$

$$C = -(-10x + 4)(-10x - 5) + (-10x - 5)$$

$$D = 81x^2 - 36$$

$$E = (10x + 9)(-4x - 2) + (-4x - 2)^2$$

$$F = -(-10x - 4)(9x - 5) + 81x^2 - 25$$