

Exercice 1

Développer et réduire les expressions suivantes.

$$A = (9x - 9)^2$$

$$B = (6x + 5)^2$$

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

$$D = (2x - 10)(5x - 1)$$

$$E = -(9x - 6)^2 - (5x + 7)^2$$

$$F = -(6x - 8)(7x - 2) + (9x + 1)(9x - 1)$$

Exercice 2

Factoriser les expressions suivantes.

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

$$B = 16x^2 - 25 + (-10x - 10)(4x + 5)$$

$$C = (-5x + 9)(-3x + 2) + (-5x + 9)(-8x + 6)$$

$$D = (4x + 10)(-7x + 2) + (-7x + 2)^2$$

$$E = -(-10x - 2)(-2x - 6) + (-2x - 6)$$

$$F = 100x^2 - 49$$

Exercice 3

Développer et réduire les expressions suivantes.

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

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

$$C = (-10x - 4)(-6x + 10)$$

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

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

$$F = -(-x - 2)(8x - 10) + (4x + 10)^2$$

Exercice 4

Factoriser les expressions suivantes.

$$A = -(-7x - 6)(9x + 7) - (-7x - 6)(2x + 10)$$

$$B = x^2 - 1 - (2x - 7)(x + 1)$$

$$C = (-6x - 4)(9x - 10) - (-6x - 4)$$

$$D = 4x^2 - 81$$

$$E = -(4x + 6)(-10x + 7) + (4x + 6)^2$$

$$F = (4x + 7)^2 - 25$$

Exercice 5

Développer et réduire les expressions suivantes.

$$A = (6x + 9)^2$$

$$B = (3x - 7)(-5x + 6)$$

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

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

$$E = -(-4x + 8)(4x - 1) - (8x + 5)^2$$

$$F = -(x - 10)^2 - (x - 1)(x + 1)$$

Exercice 6

Factoriser les expressions suivantes.

$$A = -(-9x - 10)(7x - 2) - (-9x - 10)$$

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

$$C = 1 - (-7x - 10)^2$$

$$D = (5x + 4)(9x + 4) + 25x^2 - 16$$

$$E = (-x - 6)(6x + 3) + (6x + 3)(-8x - 5)$$

$$F = -(-4x - 1)(-3x - 9) + (-3x - 9)^2$$