

Exercice 1

Développer et réduire les expressions suivantes.

$$A = (10x + 1)^2$$

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

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

$$D = (-3x + 7)(8x + 2)$$

$$E = (10x - 5)^2 - (10x + 7)^2$$

$$F = (8x - 5)(8x + 5) + (8x - 5)(-10x - 5)$$

Exercice 2

Factoriser les expressions suivantes.

$$A = 25x^2 - 49$$

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

$$C = 81x^2 - 36 + (9x + 6)(5x + 7)$$

$$D = (-10x - 1)^2 - 9$$

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

$$F = -(-7x + 5)(-6x + 4) - (-7x + 4)(-7x + 5)$$

Exercice 3

Développer et réduire les expressions suivantes.

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

$$B = (8x - 3)^2$$

$$C = (7x - 10)(-9x - 6)$$

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

$$E = (8x + 8)(8x - 8) - (3x + 6)^2$$

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

Exercice 4

Factoriser les expressions suivantes.

$$A = 49x^2 - 4 + (7x + 2)(-6x + 9)$$

$$B = -(5x - 9)(7x - 4) - (7x - 4)(6x + 1)$$

$$C = -(5x - 1)(-4x - 10) + (-4x - 10)^2$$

$$D = 64x^2 - 100$$

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

$$F = (5x + 3)^2 - 64$$

Exercice 5

Développer et réduire les expressions suivantes.

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

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

$$C = (-10x + 2)(-6x - 9)$$

$$D = (2x + 9)^2$$

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

$$F = -(8x - 8)(x - 5) + (7x - 8)^2$$

Exercice 6

Factoriser les expressions suivantes.

$$A = (9x - 6)(2x + 5) + (9x - 6)(-4x - 6)$$

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

$$C = (-6x - 8)^2 + (-9x - 1)(-6x - 8)$$

$$D = (-3x + 3)(6x - 9) + (6x - 9)$$

$$E = 49x^2 - 25 - (7x + 5)(-10x + 9)$$

$$F = 16x^2 - 64$$