

Exercice 1

Factoriser chacune des expressions littérales suivantes :

$$A = (5x + 5) \times (7x - 4) - (5x + 2) \times (5x + 5)$$

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

$$C = 81x^2 - 180x + 100$$

$$D = 9x^2 - 1$$

$$E = (-8x - 8) \times (-10x + 4) + (-10x + 4)^2$$

$$F = (10x + 7) \times (10x + 3) + 10x + 3$$

Exercice 2

Factoriser chacune des expressions littérales suivantes :

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

$$B = 36x^2 + 60x + 25$$

$$C = -(x - 3)^2 + 49x^2$$

$$D = (-x + 3) \times (9x + 2) + (4x + 8) \times (-x + 3)$$

$$E = (10x - 7) \times (8x + 2) + (8x + 2)^2$$

$$F = -(10x - 5) \times (6x - 4) + 6x - 4$$

Exercice 3

Factoriser chacune des expressions littérales suivantes :

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

$$B = -4x^2 + 81$$

$$C = 100x^2 + 20x + 1$$

$$D = -(-5x + 6) \times (3x + 7) + (2x + 1) \times (-5x + 6)$$

$$E = (9x + 8) \times (x + 1) + 9x + 8$$

$$F = (10x + 9) \times (8x - 7) + (8x - 7)^2$$

Exercice 4

Factoriser chacune des expressions littérales suivantes :

$$A = -x^2 + 9$$

$$B = (8x + 1) \times (-x - 1) - (-x - 1) \times (9x - 9)$$

$$C = -(2x + 6)^2 + 81$$

$$D = 4x^2 + 36x + 81$$

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

$$F = (2x + 8) \times (10x + 5) + 2x + 8$$

Exercice 5

Factoriser chacune des expressions littérales suivantes :

$$A = -(5x + 3) \times (-8x - 1) + (5x + 3) \times (-7x - 3)$$

$$B = 49x^2 + 112x + 64$$

$$C = -9x^2 + 36$$

$$D = -49 + (-5x + 6)^2$$

$$E = (-6x - 10) \times (-3x + 5) + (-6x - 10)^2$$

$$F = 2x + 6 + (2x + 6) \times (8x - 2)$$

Exercice 6

Factoriser chacune des expressions littérales suivantes :

$$A = (x + 6)^2 - 100$$

$$B = -16x^2 + 16$$

$$C = 49x^2 + 42x + 9$$

$$D = (x + 1) \times (-6x + 7) + (x + 1) \times (-6x + 7)$$

$$E = -(-8x + 7) \times (-10x - 10) + (-8x + 7)^2$$

$$F = (5x - 2) \times (2x + 10) + 5x - 2$$