

Exercice 1

Factoriser chacune des expressions littérales suivantes :

$$A = (8x + 3) \times (-5x - 4) + (8x + 2) \times (8x + 3)$$

$$B = 4x^2 - 49$$

$$C = 25x^2 + 90x + 81$$

$$D = x^2 - (3x - 1)^2$$

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

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

Exercice 2

Factoriser chacune des expressions littérales suivantes :

$$A = 4 - (6x + 8)^2$$

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

$$C = 49x^2 - 140x + 100$$

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

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

$$F = 4x + 1 + (4x + 1) \times (8x + 6)$$

Exercice 3

Factoriser chacune des expressions littérales suivantes :

$$A = -81 + (8x + 4)^2$$

$$B = (-8x + 9) \times (3x + 6) - (-10x + 6) \times (3x + 6)$$

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

$$D = x^2 - 25$$

$$E = (-2x + 1)^2 + (-2x + 1) \times (3x + 10)$$

$$F = (2x - 4) \times (4x + 6) + 4x + 6$$

Exercice 4

Factoriser chacune des expressions littérales suivantes :

$$A = 36x^2 - 24x + 4$$

$$B = -(4x + 9)^2 + 100x^2$$

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

$$D = (-2x + 4) \times (-10x + 2) - (-6x + 6) \times$$

$$(-2x + 4)$$

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

$$F = (6x + 3) \times (8x + 4) + 6x + 3$$

Exercice 5

Factoriser chacune des expressions littérales suivantes :

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

$$B = 36x^2 + 48x + 16$$

$$C = -(10x + 9) \times (-10x + 3) + (10x + 9) \times (-x + 10)$$

$$D = (-4x + 9)^2 - 100$$

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

$$F = (x + 7)^2 + (2x - 1) \times (x + 7)$$

Exercice 6

Factoriser chacune des expressions littérales suivantes :

$$A = -81x^2 + 100$$

$$B = -(2x - 9)^2 + 16$$

$$C = (-9x + 5) \times (10x + 7) + (3x + 10) \times (-9x + 5)$$

$$D = 49x^2 + 84x + 36$$

$$E = (6x - 5) \times (-6x + 1) - (6x - 5)^2$$

$$F = (3x + 1) \times (6x + 10) + 3x + 1$$