

Exercice 1

Factoriser chacune des expressions littérales suivantes :

$$A = 16x^2 + 32x + 16$$

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

$$C = (x + 1) \times (7x + 9) + (x + 1) \times (5x - 4)$$

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

$$E = (6x - 1) \times (10x + 9) - (6x - 1)$$

$$F = (-4x - 10) \times (4x + 7) + (4x + 7)^2$$

Exercice 2

Factoriser chacune des expressions littérales suivantes :

$$A = 100x^2 + 160x + 64$$

$$B = (2x - 4)^2 - 81x^2$$

$$C = -(-4x + 3) \times (7x + 5) + (2x - 6) \times (7x + 5)$$

$$D = 36x^2 - 1$$

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

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

Exercice 3

Factoriser chacune des expressions littérales suivantes :

$$A = 16x^2 + 24x + 9$$

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

$$C = (-10x + 3) \times (-3x + 8) - (x + 3) \times (-10x + 3)$$

$$D = -25x^2 + 9$$

$$E = (9x + 5) \times (8x - 2) + (9x + 5)^2$$

$$F = (9x + 4) \times (6x + 1) + 9x + 4$$

Exercice 4

Factoriser chacune des expressions littérales suivantes :

$$A = (5x + 2)^2 - 100$$

$$B = -(-7x + 9) \times (5x + 6) + (2x - 8) \times (5x + 6)$$

$$C = -9x^2 + 100$$

$$D = 36x^2 + 24x + 4$$

$$E = (6x + 4) \times (6x + 6) + (6x + 4)^2$$

$$F = x + 6 + (7x + 9) \times (x + 6)$$

Exercice 5

Factoriser chacune des expressions littérales suivantes :

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

$$B = 64x^2 - 49$$

$$C = 100x^2 - 80x + 16$$

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

$$E = (2x + 8)^2 + (2x + 8) \times (5x + 3)$$

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

Exercice 6

Factoriser chacune des expressions littérales suivantes :

$$A = 100x^2 + 40x + 4$$

$$B = -49x^2 + 9$$

$$C = (8x + 2) \times (-x + 6) + (9x + 7) \times (8x + 2)$$

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

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

$$F = (5x - 9) \times (x + 3) + 5x - 9$$