

**Exercice 1**

Factoriser chacune des expressions littérales suivantes :

$$A = 100x^2 + 60x + 9$$

$$B = -81x^2 + 16$$

$$C = (9x - 7)^2 - 36x^2$$

$$D = (2x - 8) \times (x + 7) + (3x + 1) \times (2x - 8)$$

$$E = (x + 1)^2 - (8x + 2) \times (x + 1)$$

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

**Exercice 2**

Factoriser chacune des expressions littérales suivantes :

$$A = (6x + 8) \times (2x + 10) - (7x + 5) \times (2x + 10)$$

$$B = 9x^2 + 54x + 81$$

$$C = -16 + (10x + 6)^2$$

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

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

$$F = (-3x + 5) \times (7x + 5) + (-3x + 5)^2$$

**Exercice 3**

Factoriser chacune des expressions littérales suivantes :

$$A = 4x^2 - 100$$

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

$$C = (3x + 4) \times (-10x - 8) + (7x + 4) \times (-10x - 8)$$

$$D = 25x^2 + 10x + 1$$

$$E = (2x - 3) \times (10x + 8) - (10x + 8)$$

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

**Exercice 4**

Factoriser chacune des expressions littérales suivantes :

$$A = 49x^2 + 70x + 25$$

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

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

$$D = 49x^2 - 81$$

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

$$F = (9x + 1)^2 + (-10x + 10) \times (9x + 1)$$

**Exercice 5**

Factoriser chacune des expressions littérales suivantes :

$$A = -36 + (10x + 1)^2$$

$$B = 4x^2 - 16x + 16$$

$$C = (6x + 9) \times (-10x + 4) + (6x + 9) \times (-3x + 5)$$

$$D = x^2 - 81$$

$$E = -(4x + 2) \times (4x + 1) + 4x + 1$$

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

**Exercice 6**

Factoriser chacune des expressions littérales suivantes :

$$A = (2x + 9) \times (-9x + 7) - (2x + 9) \times (3x + 10)$$

$$B = 100x^2 - 9$$

$$C = -36x^2 + (10x - 9)^2$$

$$D = 81x^2 - 72x + 16$$

$$E = (3x + 6) \times (3x - 3) + 3x - 3$$

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