

**Exercice 1**

Factoriser chacune des expressions littérales suivantes :

$$\begin{array}{l} A = 9x^2 - 81 \\ B = (6x - 6) \times (2x - 2) + (-2x - 10) \times (2x - 2) \\ C = 100x^2 + 100x + 25 \end{array} \quad \left| \quad \begin{array}{l} D = -100 + (-5x - 7)^2 \\ E = (5x + 1)^2 + (5x + 1) \times (9x + 10) \\ F = (5x - 2) \times (7x - 5) - (5x - 2) \end{array} \right.$$

**Exercice 2**

Factoriser chacune des expressions littérales suivantes :

$$\begin{array}{l} A = 36x^2 - 1 \\ B = (9x + 4)^2 - 49x^2 \\ C = -(8x - 6) \times (5x + 10) + (4x - 9) \times (5x + 10) \end{array} \quad \left| \quad \begin{array}{l} D = 9x^2 + 18x + 9 \\ E = 5x + 10 + (5x + 10) \times (9x - 4) \\ F = (7x + 5) \times (-4x + 5) + (7x + 5)^2 \end{array} \right.$$

**Exercice 3**

Factoriser chacune des expressions littérales suivantes :

$$\begin{array}{l} A = -(-10x + 9)^2 + x^2 \\ B = 25x^2 - 36 \\ C = (4x - 7) \times (2x + 4) + (4x - 7) \times (2x - 7) \end{array} \quad \left| \quad \begin{array}{l} D = 100x^2 + 140x + 49 \\ E = -(6x - 7) \times (x - 5) + x - 5 \\ F = (4x + 7) \times (-3x + 5) + (4x + 7)^2 \end{array} \right.$$

**Exercice 4**

Factoriser chacune des expressions littérales suivantes :

$$\begin{array}{l} A = 81x^2 - 9 \\ B = 81x^2 + 126x + 49 \\ C = -(9x - 6)^2 + 1 \end{array} \quad \left| \quad \begin{array}{l} D = (9x + 6) \times (9x + 9) + (5x + 5) \times (9x + 6) \\ E = (3x + 10) \times (5x - 6) + 3x + 10 \\ F = (-10x + 3) \times (-10x + 8) - (-10x + 3)^2 \end{array} \right.$$

**Exercice 5**

Factoriser chacune des expressions littérales suivantes :

$$\begin{array}{l} A = 16x^2 + 8x + 1 \\ B = -36x^2 + (-4x + 7)^2 \\ C = -(6x + 7) \times (9x + 5) + (9x + 5) \times (-4x + 10) \end{array} \quad \left| \quad \begin{array}{l} D = -49x^2 + 1 \\ E = 9x + 2 + (9x + 2) \times (6x + 2) \\ F = (-10x - 6)^2 + (-4x + 3) \times (-10x - 6) \end{array} \right.$$

**Exercice 6**

Factoriser chacune des expressions littérales suivantes :

$$\begin{array}{l} A = -64x^2 + 36 \\ B = (-9x + 4)^2 - 64x^2 \\ C = 25x^2 + 20x + 4 \end{array} \quad \left| \quad \begin{array}{l} D = (-3x + 2) \times (8x + 10) + (-3x + 2) \times (8x - 6) \\ E = 4x - 4 + (6x + 2) \times (4x - 4) \\ F = (-4x + 9)^2 - (-10x + 7) \times (-4x + 9) \end{array} \right.$$