

**Exercice 1**

Factoriser chacune des expressions littérales suivantes :

$$\left. \begin{array}{l} A = 36x^2 + 96x + 64 \\ B = (-5x - 7)^2 - 49x^2 \\ C = -(-7x + 1) \times (x + 4) + (-9x + 9) \times (-7x + 1) \end{array} \right| \begin{array}{l} D = 36x^2 - 4 \\ E = (-7x - 8)^2 + (-7x - 8) \times (-9x + 10) \\ F = (10x + 7) \times (9x + 2) + 10x + 7 \end{array}$$

**Exercice 2**

Factoriser chacune des expressions littérales suivantes :

$$\left. \begin{array}{l} A = -(4x + 1)^2 + 16 \\ B = 64x^2 + 160x + 100 \\ C = (-3x + 9) \times (-x - 8) - (-3x + 9) \times (-2x + 8) \end{array} \right| \begin{array}{l} D = -49x^2 + 81 \\ E = (8x - 1) \times (8x - 6) + 8x - 1 \\ F = (-5x - 4)^2 + (-5x - 4) \times (2x + 1) \end{array}$$

**Exercice 3**

Factoriser chacune des expressions littérales suivantes :

$$\left. \begin{array}{l} A = 49x^2 + 84x + 36 \\ B = 49x^2 - 16 \\ C = (6x + 1) \times (-5x + 5) + (x + 10) \times (6x + 1) \end{array} \right| \begin{array}{l} D = (3x - 3)^2 - 4x^2 \\ E = 3x + 2 + (3x + 2) \times (5x - 1) \\ F = (-4x + 4) \times (x - 7) - (-4x + 4)^2 \end{array}$$

**Exercice 4**

Factoriser chacune des expressions littérales suivantes :

$$\left. \begin{array}{l} A = -36 + (-6x + 3)^2 \\ B = -36x^2 + 81 \\ C = 9x^2 - 42x + 49 \end{array} \right| \begin{array}{l} D = (6x + 2) \times (4x + 3) + (6x + 2) \times (5x + 7) \\ E = -(5x - 10) + (5x - 10) \times (10x - 3) \\ F = (8x + 7) \times (10x + 4) + (10x + 4)^2 \end{array}$$

**Exercice 5**

Factoriser chacune des expressions littérales suivantes :

$$\left. \begin{array}{l} A = 100x^2 - 100x + 25 \\ B = (9x + 8)^2 - 64x^2 \\ C = (-6x + 6) \times (10x - 9) - (2x + 1) \times (-6x + 6) \end{array} \right| \begin{array}{l} D = -x^2 + 100 \\ E = (2x + 7) \times (5x + 2) + (2x + 7)^2 \\ F = 8x + 1 + (7x + 5) \times (8x + 1) \end{array}$$

**Exercice 6**

Factoriser chacune des expressions littérales suivantes :

$$\left. \begin{array}{l} A = -(5x + 1) \times (6x + 8) + (6x + 8) \times (8x - 3) \\ B = 64x^2 + 48x + 9 \\ C = (8x + 10)^2 - 64 \end{array} \right| \begin{array}{l} D = 4x^2 - 64 \\ E = (4x + 4) \times (10x + 6) + 4x + 4 \\ F = (-6x + 6)^2 + (-7x + 8) \times (-6x + 6) \end{array}$$