

Exercice 1

Factoriser chacune des expressions littérales suivantes :

$$\begin{array}{l} A = -16x^2 + (-5x + 8)^2 \\ B = (7x + 10) \times (2x + 7) - (7x + 10) \times (3x - 4) \\ C = 9x^2 + 48x + 64 \end{array} \quad \left| \quad \begin{array}{l} D = 4x^2 - 49 \\ E = (8x + 1) \times (9x + 10) + 8x + 1 \\ F = (2x + 4)^2 + (2x + 4) \times (-x + 4) \end{array} \right.$$

Exercice 2

Factoriser chacune des expressions littérales suivantes :

$$\begin{array}{l} A = (2x - 7) \times (2x + 4) + (2x + 4) \times (2x - 7) \\ B = 9x^2 - 81 \\ C = 4x^2 - 8x + 4 \end{array} \quad \left| \quad \begin{array}{l} D = -100x^2 + (-5x + 9)^2 \\ E = (2x + 2)^2 + (-4x + 7) \times (2x + 2) \\ F = 7x + 2 - (7x + 2) \times (7x + 9) \end{array} \right.$$

Exercice 3

Factoriser chacune des expressions littérales suivantes :

$$\begin{array}{l} A = -36x^2 + 16 \\ B = 25x^2 + 50x + 25 \\ C = (-3x - 3) \times (-10x + 5) - (9x + 3) \times (-10x + 5) \end{array} \quad \left| \quad \begin{array}{l} D = (3x - 4)^2 - 25x^2 \\ E = (4x - 10) \times (-2x + 1) + (-2x + 1)^2 \\ F = (4x + 8) \times (8x - 4) + 8x - 4 \end{array} \right.$$

Exercice 4

Factoriser chacune des expressions littérales suivantes :

$$\begin{array}{l} A = (9x + 3) \times (-7x + 8) + (-2x + 4) \times (-7x + 8) \\ B = 9x^2 + 36x + 36 \\ C = 16x^2 - (5x + 3)^2 \end{array} \quad \left| \quad \begin{array}{l} D = 25x^2 - 49 \\ E = (3x + 7) \times (10x + 5) + 3x + 7 \\ F = -(-6x + 7) \times (4x + 4) + (4x + 4)^2 \end{array} \right.$$

Exercice 5

Factoriser chacune des expressions littérales suivantes :

$$\begin{array}{l} A = 25x^2 + 80x + 64 \\ B = -64x^2 + (-7x + 1)^2 \\ C = 81x^2 - 64 \end{array} \quad \left| \quad \begin{array}{l} D = (-10x - 7) \times (7x - 9) + (-10x - 7) \times (x - 2) \\ E = (6x - 10) \times (9x - 8) + (6x - 10)^2 \\ F = -(8x + 7) + (7x + 3) \times (8x + 7) \end{array} \right.$$

Exercice 6

Factoriser chacune des expressions littérales suivantes :

$$\begin{array}{l} A = (10x + 9) \times (-8x + 4) + (5x - 2) \times (10x + 9) \\ B = -(-9x + 3)^2 + 25 \\ C = -x^2 + 16 \end{array} \quad \left| \quad \begin{array}{l} D = x^2 + 14x + 49 \\ E = -(3x + 1)^2 + (3x + 1) \times (6x + 9) \\ F = (3x + 8) \times (5x + 9) + 3x + 8 \end{array} \right.$$