

Exercice 1

Factoriser chacune des expressions littérales suivantes :

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

Exercice 2

Factoriser chacune des expressions littérales suivantes :

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

Exercice 3

Factoriser chacune des expressions littérales suivantes :

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

Exercice 4

Factoriser chacune des expressions littérales suivantes :

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

Exercice 5

Factoriser chacune des expressions littérales suivantes :

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

Exercice 6

Factoriser chacune des expressions littérales suivantes :

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