

Chap 7: Calcul littéral

Ex 2: Factorisation

$$G(x) = (x+1)(2x-3) + (x+1)(5x+1)$$

$$G(x) = (x+1) ((2x-3) + (5x+1))$$

$$G(x) = (x+1) (2x-3 + 5x+1)$$

$$\underline{G(x) = (x+1) (7x-2)}$$

$$H(x) = (2x+1)^2 + (2x+1)(x+3)$$

$$H(x) = (2x+1)(2x+1) + (2x+1)(x+3)$$

$$H(x) = (2x+1) ((2x+1) + (x+3))$$

$$H(x) = (2x+1) (2x+1 + x+3)$$

$$\underline{H(x) = (2x+1)(3x+4)}$$

$$I(x) = (3x-4)(2-x) - (3x-4)^2$$

$$I(x) = (3x-4)(2-x) - (3x-4)(3x-4)$$

$$I(x) = (3x-4)((2-x) - (3x-4)) \quad \begin{matrix} \uparrow \\ \text{signe négatif} \end{matrix}$$

$$I(x) = (3x-4) (2-x - 3x+4)$$

$$\underline{I(x) = (3x-4) (-4x+6)}$$

$$J(x) = (3+x)(5x+2) + (x+3)^2$$

$$J(x) = (3+x)(5x+2) + (x+3)(x+3)$$

$$J(x) = (3+x)((5x+2)+(x+3))$$

$$J(x) = (3+x)(5x+2+x+3)$$

$$\underline{J(x) = (3+x)(6x+5)}$$

⚠ Erreur
Enoncé!

$$K(x) = 7(x-1) + 14x - \underline{14} + 3x(x+1)$$

$$K(x) = 7(x-1) + 14(x-1) + 3x(x+1)$$

$$K(x) = (x-1)(7+14+3x)$$

$$\underline{K(x) = (x-1)(3x+21)}$$
 ⚡ Niveau Expert!

$$L(x) = (3x-2)^2 + (2x+3)(3x-2) + 6x - 4$$

$$L(x) = (3x-2)(3x-2) + (2x+3)(3x-2) + 2(3x-2)$$

$$L(x) = (3x-2) \left((3x-2) + (2x+3) + 2 \right)$$

$$L(x) = (3x-2) (3x-2 + 2x + 3 + 2)$$

$$\underline{L(x) = (3x-2)(5x+3)}$$
 ⚡ Niveau Expert!