

Corrigé Test 8 - n°5

Exercice 1

$$\begin{aligned}
 A &= 3x^2 - 2x + 6 - x^2 + 3x - 10 \\
 &= 3x^2 - x^2 - 2x + 3x + 6 - 10 \\
 &= 2x^2 + x - 4
 \end{aligned}$$

$$\begin{aligned}
 B &= -6 + 3x - 4x^2 - 7x + 3x^2 - 6 \\
 &= -4x^2 + 3x^2 + 3x - 7x - 6 - 6 \\
 &= -x^2 - 4x - 12
 \end{aligned}$$

Exercice 2

$$\begin{aligned}
 C &= 2x^2 - 5 - (2 - 3x) + (x^2 + x - 5) \\
 &= 2x^2 - 5 - 2 + 3x + x^2 + x - 5 \\
 &= 2x^2 + x^2 + 3x + x - 5 - 2 - 5 \\
 &= 3x^2 + 5x - 12
 \end{aligned}$$

$$\begin{aligned}
 D &= -(12 - x) + (x - 8) \\
 &= -12 + x + x - 8 \\
 &= 2x - 20
 \end{aligned}$$

Exercice 3

$$\begin{aligned}
 E &= -6(2x - 3) \\
 &= -6 \times 2x + (-6) \times (-3) \\
 &= -12x + 18
 \end{aligned}$$

$$\begin{aligned}
 F &= 9x(-2x + 3) \\
 &= 9x \times (-2x) + 9x \times 3 \\
 &= -18x^2 + 27x
 \end{aligned}$$

$$\begin{aligned}
 G &= -2(3x - 5) - 5(2x + 1) \\
 &= -2 \times 3x + (-2) \times (-5) + (-5) \times 2x + (-5) \times 1 \\
 &= -6x + 8 - 10x - 5 \\
 &= -16x + 3
 \end{aligned}$$

$$\begin{aligned}
 H &= (2x - 5)(-2 + 4x) \\
 &= 2x \times (-2) + 2x \times 4x + (-5) \times (-2) + (-5) \times 4x \\
 &= -4x + 8x^2 + 10 - 20x \\
 &= 8x^2 - 24x + 10
 \end{aligned}$$

$$\begin{aligned}
 I &= (3x - 1)^2 \\
 &= (3x - 1)(3x - 1) \\
 &= 3x \times 3x + 3x \times (-1) + (-1) \times 3x + (-1) \times (-1) \\
 &= 9x^2 - 3x - 3x + 1 = 9x^2 - 6x + 1
 \end{aligned}$$

$$J = (-x+6)(3x-5)$$

$$= -x \times 3x + (-x) \times (-5) + 6 \times 3x + 6 \times (-5)$$

$$= -3x^2 + 5x + 18x - 30$$

$$= -3x^2 + 23x - 30$$

$$K = 2x(1-4x) + (x-5)(2+5x)$$

$$= 2x + 2x \times (-4x) + (x \times 2 + x \times 5x + (-5) \times 2 + (-5) \times 5x)$$

$$= 2x - 8x^2 + 2x + 5x^2 - 10 - 25x$$

$$= -3x^2 - 21x - 10$$

$$L = -2x(x^2 + 5x - 1) - (x-1)^2$$

$$= -2x \times (x^2) + (-2x) \times 5x + (-2x) \times (-1) - ((x-1)(x-1))$$

$$= -2x^3 - 10x^2 + 2x - (x^2 - x - x + 1)$$

$$= -2x^3 - 10x^2 + 2x - x^2 + x + x - 1$$

$$= -2x^3 - 11x^2 + 4x - 1$$

Corrigi Test 8 - va

Exercise 1

$$\begin{aligned}
 A &= 2x^2 - 6x + 5 - x^2 + 5x - 7 \\
 &= 2x^2 - x^2 - 6x + 5x + 5 - 7 \\
 &= x^2 - x - 2
 \end{aligned}$$

$$\begin{aligned}
 B &= -4 + 2x - 8x^2 - 5x + 2x^2 + 5 \\
 &= -8x^2 + 2x^2 + 2x - 5x - 4 + 5 \\
 &= -6x^2 - 3x + 1
 \end{aligned}$$

Exercise 2

$$\begin{aligned}
 C &= x^2 - 4 - (2-x) + (x^2 + 2x + 5) \\
 &= x^2 - 4 - 2 + x + x^2 + 2x + 5 \\
 &= 2x^2 + 3x - 1
 \end{aligned}$$

$$\begin{aligned}
 D &= -(x-10) + (x+8) \\
 &= -x + 10 + x + 8 \\
 &= 18
 \end{aligned}$$

Exercise 3

$$\begin{aligned}
 E &= -8(3x-4) \\
 &= -8 \times 3x + (-8) \times (-4) \\
 &= -24x + 32
 \end{aligned}$$

$$\begin{aligned}
 F &= 9x(-2x+4) \\
 &= 9x \times (-2x) + 9x \times 4 \\
 &= -18x^2 + 36x
 \end{aligned}$$

$$\begin{aligned}
 G &= -2(3x-4) - 3(x+2) \\
 &= -2 \times 3x + (-2) \times (-4) + (-3) \times x + (-3) \times 2 \\
 &= -6x + 8 - 3x - 6 \\
 &= -9x + 2
 \end{aligned}$$

$$\begin{aligned}
 H &= (2x-5)(-3+3x) \\
 &= 2x \times (-3) + 2x \times 3x + (-5) \times (-3) + (-5) \times 3x \\
 &= -6x + 6x^2 + 15 - 15x \\
 &= 6x^2 - 21x + 15
 \end{aligned}$$

$$\begin{aligned}
 I &= (2x-1)^2 \\
 &= (2x-1)(2x-1) \\
 &= 2x \times 2x + 2x \times (-1) + (-1) \times 2x + (-1) \times (-1) \\
 &= 4x^2 - 2x - 2x + 1 \\
 &= 4x^2 - 4x + 1
 \end{aligned}$$

$$\begin{aligned}
 J &= (-x+7)(2x-4) \\
 &= (-x) \times 2x + (-x) \times (-4) + 7 \times 2x + 7 \times (-4) \\
 &= -2x^2 + 4x + 14x - 28 \\
 &= -2x^2 + 18x - 28
 \end{aligned}$$

$$\begin{aligned}
 K &= 3x(1-4x) + (x-5)(3+4x) \\
 &= 3x - 12x^2 + x \times 3 + x \times 4x + (-5) \times 3 + (-5) \times 4x \\
 &= 3x - 12x^2 + 3x + 4x^2 - 15 - 20x \\
 &= -8x^2 - 14x - 15
 \end{aligned}$$

Bances

$$\begin{aligned}
 L &= -3x(x^2 + 2x - 1) - (x-2)^2 \\
 &= -3x \times x^2 + (-3x) \times 2x + (-3x) \times (-1) - [(x-2)(x-2)] \\
 &= -3x^3 - 6x^2 + 3x - (x \times x + x \times (-2) + (-2) \times x + (-2) \times (-2)) \\
 &= -3x^3 - 6x^2 + 3x - (x^2 - 2x - 2x + 4) \\
 &= -3x^3 - 6x^2 + 3x - x^2 + 4x - 4 \\
 &= -3x^3 - 7x^2 + 7x - 4
 \end{aligned}$$