

Correction du devoir n°8 Géométrie

Ex1: pour $x=3$

$$\begin{aligned} \frac{1}{25} \quad A &= 3x(6-x) \\ &= 3 \times 3 \times (6-3) \\ 0,5 \quad &= 9 \times 3 = 27 \end{aligned}$$

$$\begin{aligned} B &= 2x^2 - 5x + 4 \\ &= 2 \times 3^2 - 5 \times 3 + 4 \\ &= 2 \times 9 - 15 + 4 \\ 0,5 \quad &= 18 - 15 + 4 = 7 \end{aligned}$$

pour $x=-2$

$$\begin{aligned} A &= 3x(6-x) \\ &= 3 \times (-2) \times (6 - (-2)) \\ 0,75 \quad &= -6 \times 8 = -48 \end{aligned}$$

$$\begin{aligned} B &= 2x^2 - 5x + 4 \\ &= 2 \times (-2)^2 - 5 \times (-2) + 4 \\ &= 2 \times 4 + 10 + 4 \\ 0,75 \quad &= 8 + 14 = 22 \end{aligned}$$

Ex2: $A = 7x(2-3x) = 14x - 21x^2$ 0,5

$$\begin{aligned} B &= 5y - (y - 6y^2 + 11) \\ &= 5y - y + 6y^2 - 11 = 6y^2 + 4y - 11 \end{aligned} \quad \begin{matrix} 0,5 \\ 0,5 \end{matrix}$$

$$\begin{aligned} \frac{1}{3}, 25 \quad C &= (4+5x)(x+2) = 4x + 8 + 5x^2 + 10x \\ &= 5x^2 + 14x + 8 \end{aligned} \quad \begin{matrix} 1 \\ 1 \end{matrix}$$

$$\begin{aligned} D &= (2y-1)(5-3y) = 10y - 6y^2 - 5 + 3y \\ &= -6y^2 + 13y - 5 \end{aligned} \quad \begin{matrix} 1,25 \\ 1,25 \end{matrix}$$

Ex3: $A = 5a + 10 = 5(a+2)$ 0,5

$$B = 14y^2 - 21y = 7y(2y-3) \quad 0,5$$

$$\frac{1}{2} \quad C = 12 - 12x = 12(1-x) \quad 0,5$$

$$D = -5x^2 - 10 = -5(x^2 + 2) \quad 0,5$$

Ex4: 1) pour $x=3$ $S = (3+2x)(4x-1)$

$$\begin{aligned} \frac{1}{2}, 25 \quad &= (3+2 \times 3) \times (4 \times 3 - 1) \\ &= 9 \times 11 = 99 \end{aligned} \quad \begin{matrix} 0,75 \\ 0,75 \end{matrix}$$

$$2) S = 12x - 3 + 8x^2 - 2x = 8x^2 + 10x - 3 \quad 1$$

$$\begin{aligned} 3) \text{ pour } x=3 \quad S &= 8 \times 3^2 + 10 \times 3 - 3 \\ &= 8 \times 9 + 30 - 3 = 72 + 30 - 3 = 99 \end{aligned} \quad 0,5$$