

**13**

Réduire les expressions suivantes :

$$A(x) = 5(x-1) - 2(x-2) - 3x + 1 ;$$

$$B(x) = -(x-3) + 3(2x-1) - 2(2x-3) ;$$

$$C(x) = x - 2 - 5(x-3) + 3(-x-4) ;$$

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

$$\begin{aligned} A(x) &= 0x + 0 \\ &= 0 \end{aligned}$$

**14**

Développer, réduire et ordonner les expressions :

$$A(x) = 2x(x-3) - 5(x-1)(x+2) ;$$

$$B(x) = -x(x+2) - 3(x^2-2) + 2x^2 - 6 ;$$

$$C(x) = (x+3)(-2x+1) - 3x(x-2) ;$$

$$B(x) = -(x-3) + 3(2x-1) - 2(2x-3) ;$$

$$= -x + 3 + 6x - 3 - 4x + 6$$

$$B(x) = x + 6$$

$$C(x) = x - 2 - 5(x-3) + 3(-x-4)$$

$$= x - 2 - 5x + 15 - 3x - 12$$

$$C(x) = -7x + 1$$

$$\text{ou } A(x) = 2x^2 - 6x + (-5x+5)(x+2)$$

$$\textcircled{14} A(x) = 2x^2 - 6x - (5x-5)(x+2)$$

$$= 2x^2 - 6x - (5x^2 + 10x - 5x - 10)$$

$$= 2x^2 - 6x - 5x^2 - 10x + 5x + 10$$

$$= -3x^2 - 11x + 10$$

$$B(x) = -x^2 - 2x - 3x^2 + 6 + 2x^2 - 6$$

$$= -2x^2 - 2x$$

 $\textcircled{14}$ 

$$\begin{aligned} \textcircled{14} C(x) &= -2x^2 + x - 6x + 3 - 3x^2 + 6x \\ &= -5x^2 + x + 3 \end{aligned}$$