

Correction de l'interno.

exo 1

$$A = (7-3x) - (3-2x) + (6-4x)$$

$$A = 7-3x-3+2x+6-4x$$

$$A = -5x+5.$$

$$B = (a-3b) - (a+3b)$$

$$B = a-3b-a-3b.$$

$$B = -6b.$$

exo 2

$$C = 3(2x-1) - 2(1-5x)$$

$$C = 6x-3-2+10x$$

$$C = 16x-5$$

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

$$D = x^2-3x+2x-6$$

$$D = x^2-x-6$$

$$E = (x-3)(x+3) - 2(x-1) - x^2 + 2x - 6$$

$$E = x^2+3x-3x-9-2x+2-x^2+2x-6$$

$$E = -13$$

$$F = (x-5)^2$$

$$F = (x-5)(x-5)$$

$$F = x^2-5x-5x+25.$$

$$F = x^2-10x+25.$$

exo 3

$$\begin{aligned} 1. \quad G(-2) &= (-2)^2 - 5(-2) + 6 \\ &= 4 + 10 + 6 \\ &= 20 \end{aligned}$$

$$\begin{aligned} H(-2) &= (-2-2)(-2-3) \\ &= -4 \times (-5) \\ &= 20 \end{aligned}$$

$$\begin{aligned} I(-2) &= (-2-1)(-2-2) - 2(-2-1) + 2 \\ &= (-3)(-4) - 2(-3) + 2 \\ &= 12 + 6 + 2 \\ &= 20. \end{aligned}$$

2. On remarque que $G(-2) = H(-2) = I(-2)$. On ne peut rien conclure pour l'instant.

$$3. \quad H(x) = (x-2)(x-3)$$

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

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

$$F(x) = (x-1)(x-2) - 2(x-1) + 2$$

$$F(x) = x^2 - 2x - x + 2 - 2x + 2 + 2$$

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

4. Pour $x=0$

$$G(0) = 0^2 - 5 \times 0 + 6$$

$$G(0) = 6$$

Pour $x=3$

$$H(3) = (3-2)(\underbrace{3-3}_0)$$

$$= 0.$$

Pour $x=1$

$$I(1) = (\underbrace{1-1}_0)(1-2) - 2(\underbrace{1-1}_0) + 2$$

$$I(1) = 2$$

exco 4.

1a. $\cdot 8$
 $\cdot 8-6=2$
 $\cdot 2 \times 8=16$
 $\cdot 16+9=25$

b. $\cdot -3$
 $\cdot -3-6=-9$
 $\cdot -9 \times (-3)=27$
 $\cdot 27+9=36$

2. $\cdot x$
 $\cdot x-6$
 $\cdot (x-6)x$
 $\cdot x(x-6)+9=x^2-6x+9$

3. $H=(x-3)^2$
 $= (x-3)(x-3)$
 $= x^2-3x-3x+9$
 $= x^2-6x+9$

exco 5.

1a. $\text{Area}(A) = x(x+2)$

b. $\text{Area}(A) = x^2 + 2x$

2a. $\text{Area}(B) = x \times x + \frac{4 \times x}{2}$
 $= x^2 + 2x$

b. $\text{Area}(A) = \text{Area}(B)$

3. si $x=3$ $\text{Area} = 3^2 + 2 \times 3$
 $= 9 + 6$
 $= 15$