

# Questions flashes

Développer et réduire l'expression

$$A = (x - 3) \times 4 - (x - 3)^2$$

Mettre sous forme canonique

$$B = 9x^2 - 54x + 65$$

**Bonus** factoriser ces 2 expressions.

## Correction

$$\begin{aligned} A &= 4x - 12 - (x^2 - 6x + 9) \\ &= 4x - 12 - x^2 + 6x - 9 \\ &= -x^2 + 10x - 21 \end{aligned}$$

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$$B = 9x^2 - 54x + 65$$

$$\alpha = \frac{-b}{2a} = 3$$

$$\beta = -\frac{b^2 - 4ac}{4a} = -\frac{36 + 38}{4} = -16$$

$$B = 9(x - 3)^2 - 16$$

# Bonus

$$\begin{aligned}A &= (x - 3) \times 4 - (x - 3)^2 \\ &= (x - 3)(4 - x + 3) \\ &= (x - 3)(-x + 7)\end{aligned}$$

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$$\begin{aligned}B &= 9(x - 3)^2 - 16 \\ &= [3(x - 3)]^2 - 4^2 \\ &= (3x - 9 - 4)(3x - 9 + 4) \\ &= (3x - 13)(3x - 5)\end{aligned}$$