

Nom :

Test 1 : Factoriser les expressions A, B et C suivantes :

$$\begin{aligned}A &= 36 - (2x - 1)^2 \\&= 6^2 - (2x - 1)^2 \\&= (6 - (2x - 1)) (6 + (2x - 1)) \\&= (6 - 2x + 1) (6 + 2x - 1) \\&= (7 - 2x) (5 + 2x)\end{aligned}$$

$$\begin{aligned}B &= 4x^2 + 28x + 49 \\&= (2x)^2 + 28x + 7^2 \\&= (2x + 7)^2\end{aligned}$$

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

Test 2 : Factoriser les expressions A, B et C suivantes :

$$\begin{aligned}A &= 25 - (2x - 1)^2 \\&= 5^2 - (2x - 1)^2 \\&= (5 - (2x - 1)) (5 + (2x - 1)) \\&= (5 - 2x + 1) (5 + 2x - 1) \\&= (6 - 2x) (4 + 2x)\end{aligned}$$

$$\begin{aligned}B &= 4x^2 + 24x + 36 \\&= (2x)^2 + 24x + 6^2 \\&= (2x + 6)^2\end{aligned}$$

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