

Factorization - Niveau 2

①

Exercice 35 p 30

	Forme factorisée	Forme développée
a)	$(x+5)^2$	$x^2 + 10x + 25$
b)	$(x-6)^2$	$x^2 - 12x + 36$
c)	$(2x+10)^2$	$4x^2 + 40x + 100$
d)	$(x+10)(x-10)$	$x^2 - 100$
e)	$(x+11)(x-11)$	$x^2 - 121$
f)	$(7x-1)^2$	$49x^2 - 14x + 1$

Exercice 8 p 30

$$a) x^2 + 2x + 1 = (x+1)^2$$

$$b) x^2 - 10x + 25 = (x-5)^2$$

$$c) x^2 + 12x + 36 = (x+6)^2$$

Exercice 3 p 30

$$a) x^2 - 81 = (x+9)(x-9)$$

$$b) x^2 - 1 = (x+1)(x-1)$$

$$c) 9x^2 - 4 = (3x+2)(3x-2)$$

Exercice 41 p 32

$$A = x^2 - 16 = (x+4)(x-4)$$

$$B = 9x^2 - 24x + 16 = (3x-4)^2$$

$$C = x^2 + 20x + 100 = (x+10)^2$$

Exercício 42 p32

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

$$\begin{aligned} E &= (x-2)^2 - 9 = \left((x-2) + 3 \right) \left((x-2) - 3 \right) \\ &= (x+1) (x-5) \end{aligned}$$

$$\begin{aligned} F &= (3x-1)^2 - 1 = \left((3x-1) + 1 \right) \left((3x-1) - 1 \right) \\ &= 3x \times (3x-2) \end{aligned}$$