

Identités Remarquables - Deu

Niveau 2

Exercice 1 p20

$$A = (y+2)(y-2) \\ = y^2 - 4$$

$$B = (7+x)(7-x) \\ = 49 - x^2$$

$$C = (3+10x)(10x-3) \\ = (10x+3)(10x-3) \\ = 100x^2 - 9$$

$$D = (4+2x)(4-2x) \\ = 16 - 4x^2$$

$$E = (6y-5)(6y+5) \\ = 36y^2 - 25$$

$$F = (8y-1)(8y+1) \\ = 64y^2 - 1$$

Exercice 2 p20

$$a) (2n+5)(2n-5) = 4n^2 - 25$$

$$b) 205 \times 195 = (200+5)(200-5) \\ = (2 \times 100 + 5)(2 \times 100 - 5) \\ = 4 \times 100^2 - 25 \\ = 40000 - 25 = 39975$$

Exercice 5 p20

$$a) 4 \rightarrow 4 \times 2 = 8 \rightarrow 8 - 1 = 7 \rightarrow 7 \times 7 = 49 \rightarrow 49 - 64 = -15$$

$$b) x \rightarrow 2x \rightarrow 2x - 1 \rightarrow (2x - 1)^2 \rightarrow (2x - 1)^2 - 64$$

F2. D1

$$A = (4x+3)^2 \\ = 16x^2 + 24x + 9$$

$$B = (4x+8)(4x-8) \\ = 16x^2 - 64$$

$$C = (6x-3)^2 \\ = 36x^2 - 36x + 9$$