

Ex 4

$$A = (5x - 8)^2$$

$$= 25x^2 - 80x + 64$$

$$B = (7x + 7)(7x - 7)$$

$$= 49x^2 - 49$$

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

$$= 4x^2 - 1$$

$$D = (9x - 8)^2$$

$$= 81x^2 - 144x + 64$$

$$E = -(x + 5)(x - 5)$$

$$= -(x^2 - 25)$$

$$= -x^2 + 25$$

$$F = \left(\frac{3}{10}x - \frac{5}{8}\right)\left(\frac{5}{8}x + \frac{3}{10}\right) \quad \Delta \text{ pas une identité remarquable.}$$

$$F = \frac{15}{80}x^2 + \frac{9}{100}x - \frac{25}{64}x - \frac{15}{80}$$

$$= \frac{3}{16}x^2 + \frac{(9 \times 64 - 25 \times 100)}{6400}x - \frac{3}{16}$$

$$= \frac{3}{16}x^2 - \frac{481}{1600}x - \frac{3}{16}$$

Ex 5

$$A = (10x + 8)(10x - 8)$$

$$= 100x^2 - 64$$

$$B = (6x + 6)^2$$

$$= 36x^2 + 72x + 36$$

$$C = (3x - 4)^2$$

$$= 9x^2 - 24x + 16$$

$$D = (7x - 9)(9x + 7) \quad \Delta \text{ pas une identité remarquable}$$

$$= 63x^2 + 49x - 81x - 63$$

$$= 63x^2 - 32x - 63$$

$$E = -(8x + 1)(x - 8)$$

$$= -(8x^2 - 64x + x - 8)$$

$$= -8x^2 + 63x + 8$$

$$F = \left(\frac{7}{2}x - \frac{8}{7}\right)^2$$

$$= \frac{49}{4}x^2 - 2 \times \left(\frac{7}{2}x\right) \times \left(\frac{8}{7}\right) + \frac{64}{49}$$

$$= \frac{49}{4}x^2 - 8x + \frac{64}{49}$$

Ex 6

$$A = (9x + 3)^2$$

$$= 81x^2 + 54x + 9$$

$$B = (4x - 8)(8x + 4) \quad \Delta \text{ pas une IR.}$$

$$= 32x^2 + 16x - 64x - 32$$

$$= 32x^2 - 48x - 32$$

(5)

$$C = (10x+8)(10x-8)$$

$$= 100x^2 - 64$$

$$D = (9x-10)^2$$

$$= 81x^2 - 180x + 100$$

$$E = -(2x+4)^2$$

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

$$= -4x^2 - 16x - 16$$

$$F = \left(\frac{1}{9}x - \frac{7}{6}\right)^2$$

$$= \frac{1}{81}x^2 - 2 \times \left(\frac{1}{9}x\right) \times \frac{7}{6} + \frac{49}{36}$$

$$= \frac{x^2}{81} - \frac{7x}{27} + \frac{49}{36}$$