

CORRECTION DU DEBUT DE L'EXERCICE 2 SUR LES FACTORISATIONS

a) $49 - 25x^2 = 7^2 - (5x)^2 = (7 - 5x)(7 + 5x)$

b) $(x - 1)(2x + 1) + (x + 3)(x - 1) = (x - 1)(2x + 1 + x + 3) = (x - 1)(3x + 4)$

c) $9x^2 + 12x + 4 = (3x)^2 + 2 \times 3x \times 2 + 2^2 = (3x + 2)^2$

d) $-1 + 4x^2 = 4x^2 - 1 = (2x)^2 - 1^2 = (2x - 1)(2x + 1)$

e) $16x - 4x(x - 1) = 4x \times 4 - 4x(x - 1) = 4x[4 - (x - 1)] = 4x(4 - x + 1) = 4x(5 - x)$

f) $x^2 - x + \frac{1}{4} = x^2 - 2 \times x \times \frac{1}{2} + \left(\frac{1}{2}\right)^2 = \left(x - \frac{1}{2}\right)^2$