CORRECTION DU CB N°9

i) $\quad F_1 = \dfrac{x^4 - 5x^3 + 5x^2 - 4x + 1}{x^2(x-1)^2} = 1 - \dfrac{2}{x} + \dfrac{1}{x^2} - \dfrac{1}{x-1} - \dfrac{2}{(x-1)^2}$

ii) $\quad F_2 = \dfrac{1 + 4x^2}{(1+3x^2)(1+2x^2)} = -\dfrac{1}{1+3x^2} + \dfrac{2}{1+2x^2}$

iii) $\quad F_3 = \dfrac{5x^2 - 3x + 2}{x(x^2 - x + 1)} = \dfrac{2}{x} + \dfrac{3x-1}{x^2 - x + 1}$

iv) $\quad F_4 = \dfrac{3x^2 - 4x + 4}{x^3 - 3x^2 + 2x} = \dfrac{2}{x} - \dfrac{3}{x-1} + \dfrac{4}{x-2}$

CORRECTION DU CB N°9

i) $\quad F_1 = \dfrac{2x^4 - 4x^3 + 5x^2 - x + 1}{x^2(x-1)^2} = 2 + \dfrac{1}{x} + \dfrac{1}{x^2} - \dfrac{1}{x-1} + \dfrac{3}{(x-1)^2}$

ii) $\quad F_2 = \dfrac{2 + 7x^2}{(1+3x^2)(1+2x^2)} = -\dfrac{1}{1+3x^2} + \dfrac{3}{1+2x^2}$

iii) $\quad F_3 = \dfrac{5x^2 - 5x + 3}{x(x^2 - x + 1)} = \dfrac{3}{x} + \dfrac{2x-2}{x^2 - x + 1}$

iv) $\quad F_4 = \dfrac{x^2 - 3x + 6}{x^3 - 3x^2 + 2x} = \dfrac{3}{x} - \dfrac{4}{x-1} + \dfrac{2}{x-2}$