

1)

$$F(x) = 1,1x^4 - 2,2x^3 + 0,7x^2 - 2x + 2$$

$$F'(x) = 4,4x^3 - 6,6x^2 + 1,4x - 2 + 0$$

$$F'(x) = 4,4(1,25)^3 - 6,6(1,25)^2 + 1,4(1,25) - 2 + 0$$

$$F'(1,25) = 0,098438$$

$$F(x) = e [-0,098438 - 0,098438, -0,098438 + 0,098438]$$

$$F(x) = e [-2,067188, -1,870312]$$

2)

$$f(x) = \cos(x) \ln(x)$$

$$f'(x) = \cos(x)/x - \sin(x) \ln(x)$$

$$f(\bar{x}) = \pi/3 = 0,36963238 = \text{Valor aproximado}$$

$$\Delta f(\bar{x}) = (\cos(\pi/3)/(\pi/3) - \sin(\pi/3) * \ln(2(\pi/3))) * 0,005 = -8,137862419 \times 10^{-4} = \text{Valor aproximado}$$

$$f(x) \in [(0,36963238) - (-8,137862419 \times 10^{-4})] = [(0,36963238) + (-8,137862419 \times 10^{-4})] =$$

$$f(x) [0,3704461662, 0,36881859380]$$