1) $\tilde{x} = 1,25 \quad \Delta\tilde{x} = 0,06$

$|f(x) - f(\tilde{x})| \leq |f'(\tilde{x})| \cdot |x - \tilde{x}|$

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

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

$x \in [\tilde{x} - \Delta\tilde{x}, \tilde{x} + \Delta\tilde{x}]$

$\Delta f(\tilde{x}) = 0,0984375$

$f(x) \in [f(1,25) + \Delta f(\tilde{x}), f(1,25) - \Delta f(\tilde{x})$

$f(\tilde{x}) = 1,1(1,25)^4 - 2,2(1,25)^3 + 0,7(1,25)^2 - 2(1,25)$

$f(\tilde{x}) = -1,017578125$

$f(x$

$[-1,116015625, -0,919140625$

2) $\bar{x} = \pi/3$ $\qquad \Delta\bar{x} = 0{,}005$

$$f_{(x)} = \cos(x) \cdot \ln(2x)$$

$$f'_{(x)} = -\mathrm{Sen}(x) \cdot \ln(2x) + \cos(x) \cdot \frac{1}{x}$$

$$\Delta f \bar{x} \; |0{,}43752581136| \cdot \Delta x$$

$$\Delta f \bar{x} = 8{,}137862419 \times 10^{-4}$$

$$f(x) = [0{,}368812 \; , \; 0{,}37044611$$