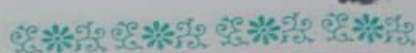
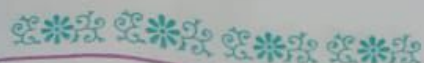


$S_L \cdot T_M \cdot Q_M \cdot Q_J \cdot S_V \cdot S_S \cdot D_D$

ultimo intervalo $\Rightarrow [0.3515, 0.3593]$
ponto medio $= 0.3554 = c$

$$\begin{aligned}\text{criterio}(i) &\Rightarrow |f(c)| < \epsilon \\ &\Rightarrow |1 - 0.0049| < \epsilon \\ &0.0049 < 0.01 \quad \checkmark\end{aligned}$$

$$\begin{aligned}\text{Criterio}(ii) &\Rightarrow |b - a| < \epsilon \\ &\Rightarrow |0.3593 - 0.3515| < 0.01 \\ &0.0078 < 0.01 \quad \checkmark\end{aligned}$$



$$d_L \cdot l_M \cdot l_M \cdot l_J \cdot d_V \cdot d_S \cdot d_D$$

$$K=5$$

$$\text{Intervalo} \Rightarrow [0.3125, 0.3437]$$

$$\text{ponto medio} = C = 0.3434$$

$$f(a) = -0.1168$$

$$f(b) = 0.045$$

$$f(c) = -0.0352$$

$f(a)$ e $f(c)$ tem o mesmo sinal, então descartamos o lado "a"

$$K=6$$

$$\text{Intervalo} \Rightarrow [0.3434, 0.3437]$$

$$\text{ponto medio} = C = 0.3593$$

$$f(a) = -0.3522$$

$$f(b) = 0.045$$

$$f(c) = 0.005$$

$f(b)$ e $f(c)$ tem o mesmo sinal, então descartamos o lado "b":

$$K=7$$

$$\text{Intervalo} \Rightarrow [0.3434, 0.3593]$$

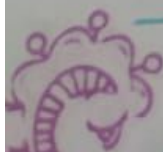
$$\text{ponto medio} = C = 0.3519$$

$$f(a) = -0.0352$$

$$f(b) = 0.005$$

$$f(c) = -0.015$$

$f(a)$ e $f(c)$ tem o mesmo sinal, então descartamos o lado "a"



$$S_L \cdot T_M \cdot Q_M \cdot Q_J \cdot S_V \cdot S_S \cdot D_D$$

$$K=2$$

Intervalo $\Rightarrow [0, 0.5]$

ponto medio $= c = 0.25$

$$f(a) = -1$$

$$f(b) = 0.3512$$

$$f(c) = -0.28402$$

$f(a)$ e $f(c)$ tem o mesmo sinal, então descartamos o lado de $f(a)$

$$K=3$$

Intervalo $\Rightarrow [0.25, 0.5]$

ponto medio $= c = 0.375$

$$f(a) = -0.2840$$

$$f(b) = 0.3512$$

$$f(c) = 0.045$$

$f(b)$ e $f(c)$ tem o mesmo sinal, então descartamos o lado $f(b)$.

$$K=4$$

Intervalo $\Rightarrow [0.25, 0.375]$

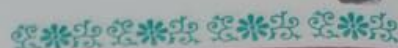
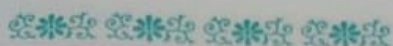
ponto medio $= c = 0.3125$

$$f(a) = -0.284$$

$$f(b) = 0.045$$

$$f(c) = -0.0352$$

$f(a)$ e $f(c)$ tem o mesmo sinal, então descartamos o lado "a".



$S_L \cdot T_M \cdot O_M \cdot O_S \cdot S_V \cdot S_S \cdot O_D$

① a) $[-1, 0]$

b) $[0, 1]$

c) $[1, 2]$

d) $[5, 6]$

② intervalo inicial = $[0, 1]$

Calculando o valor de K

$$K \geq \frac{\ln(1-0) - \ln(0,01)}{\ln(2)}$$

$K \geq 6,6$ logo temos $K = 7$

Iterações

$K = 1$

intervalo $\Rightarrow [0, 1]$

ponto médio = $C = 0,5$

$f(a) = -1$

$f(b) = 1,2817$

$f(c) = 0,3512$

$f(a)$ e $f(c)$ tem o mesmo $S(ma)$, então descartamos o lado de $f(b)$

