$$C \simeq \frac{\| x_k - x_{k-1} \|_\infty}{\| x_{k-1} - x_{k-2} \|_\infty}$$

THE ASYMPTOTIC ERROR CONSTANT IS A (SCALAR) VALUE REPRESENTING THE ASYMPTOTIC TREND OF ERROR BY ∞ NORM AT ANY POINT IN THE SERIES OF ITERATIONS

$$C_1 \simeq \frac{\| x_2 - x_1 \|_\infty}{\| x_1 - x_0 \|_\infty} \simeq \frac{\left\| \begin{bmatrix} 0.75 \\ 1.75 \\ 2.75 \end{bmatrix} - \begin{bmatrix} 0.5 \\ 1.0 \\ 2.5 \end{bmatrix} \right\|_\infty}{\left\| \begin{bmatrix} 0.5 \\ 1.0 \\ 2.5 \end{bmatrix} - \begin{bmatrix} x \\ x \\ x \end{bmatrix} \right\|_\infty} = \frac{\left\| \begin{bmatrix} 0.25 \\ 0.75 \\ 0.25 \end{bmatrix} \right\|_\infty}{\left\| \begin{bmatrix} 0.5 \\ 1.0 \\ 2.5 \end{bmatrix} \right\|_\infty}$$

$$\rightarrow \frac{0.75}{2.5} = \boxed{0.3 = C_1}$$

... CHECK YOUR UNDERSTANDING OF ∞ NORM OP. ON A VECTOR

... IT IS COMMON TO VERIFY BY TAKING ∞ NORM (INF) OF VECTOR W/ KNOWN ∞ NORM ... IT IS REVISED

CHECK $x^{(0)}$, $x^{(1)}$, $x^{(2)}$ ARE CORRECT IN CODE

$\rightarrow$ THEY ARE

NOW CHECK C's ARE CORRECT

DID CHECK FIRST C OUTPUT ... IT MATCHES, BUT THEN OSC'S BETWEEN 0.3 & 0.25

$\rightarrow$ CHECK HIGHER ITERATIONS