

$$A = 0.8 \quad f'(A) = -27.552$$

$$B = \lambda_0 + 16(t_0) = 0 + 16(0.1) = 1.6$$

$$f'(B) = f'(1.6) = -25.632 < 0 \quad \text{OK}$$

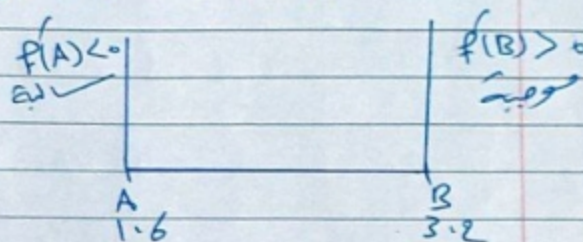
$$A = 1.6 \quad f'(A) = -25.632$$

$$B = \lambda_0 + 32(t_0) = 0 + 32(0.1) = 3.2$$

$$f'(B) = f'(3.2) = 350.688 > 0 \quad \text{OK}$$

$$A = 1.6 \quad f'(A) = -25.632$$

$$B = 3.2 \quad f'(B) = 350.688$$



iteration 4) :-

$$\lambda_1 = A - \frac{f'(A)(B-A)}{f'(B) - f'(A)}$$

$$\lambda_1 = 1.6 - \frac{(-25.632)(3.2-1.6)}{350.688 + 25.632}$$

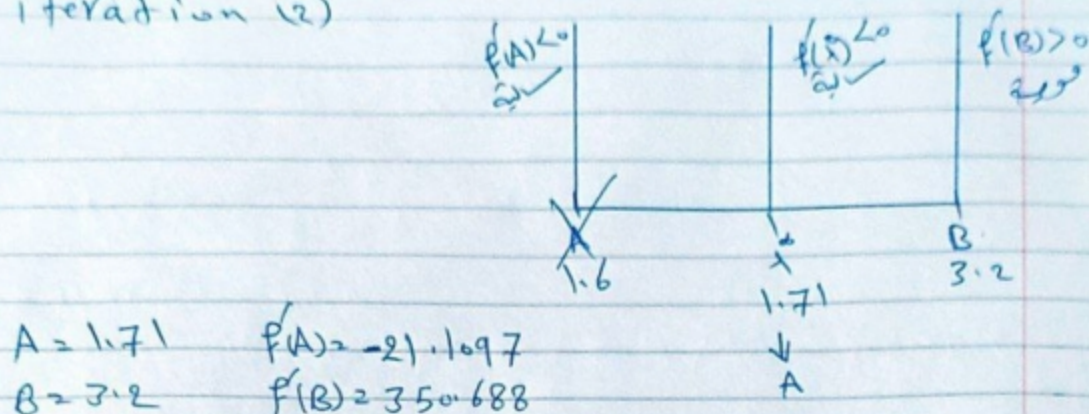
$$\lambda_1 = 1.6 + 0.11$$

$$\lambda_1 = 1.71$$

$$f'(\lambda_1) = f'(1.71) = -21.1097$$

$$|f'(\lambda_1)| = |-21.1097| = 21.1097 > \epsilon$$

iteration (2)



$$\lambda_2 = A - \frac{f(A)(B-A)}{f(B)-f(A)}$$

$$\lambda_2 = 1.71 - \frac{(-21.1097)(3.2-1.71)}{350.688 + 21.1097}$$

$$\lambda_2 = 1.71 + 0.08$$

$$\lambda_2 = 1.79$$

$$f(\lambda_2) = f(1.79) = -16.7302$$

$$|f(\lambda_2)| = |-16.7302| = 16.7302 > \epsilon$$