

1. (a) Log-log plots were made for  $\tanh(x)=(F1)$  using various integration schemes from 0 to 1

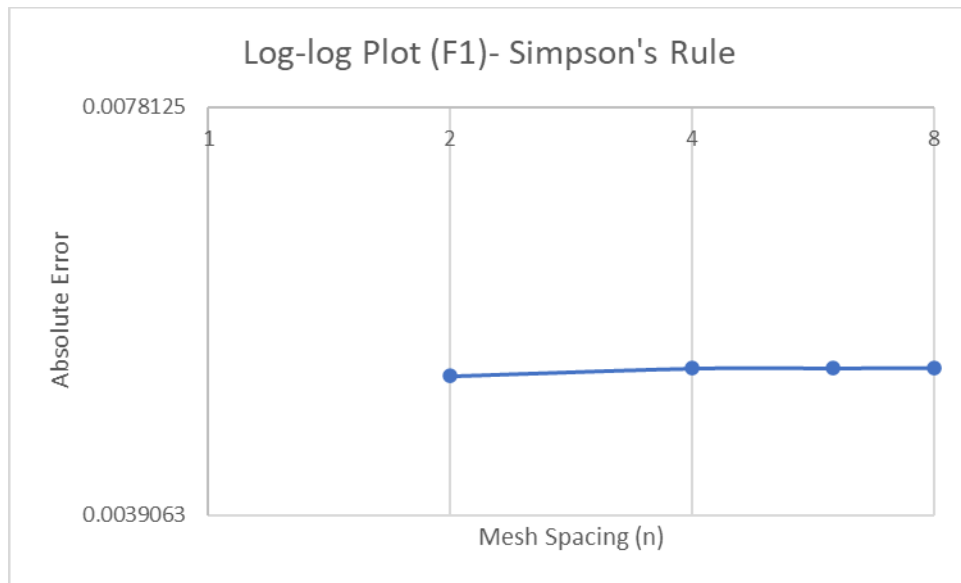


Fig.1- Simpson's Rule

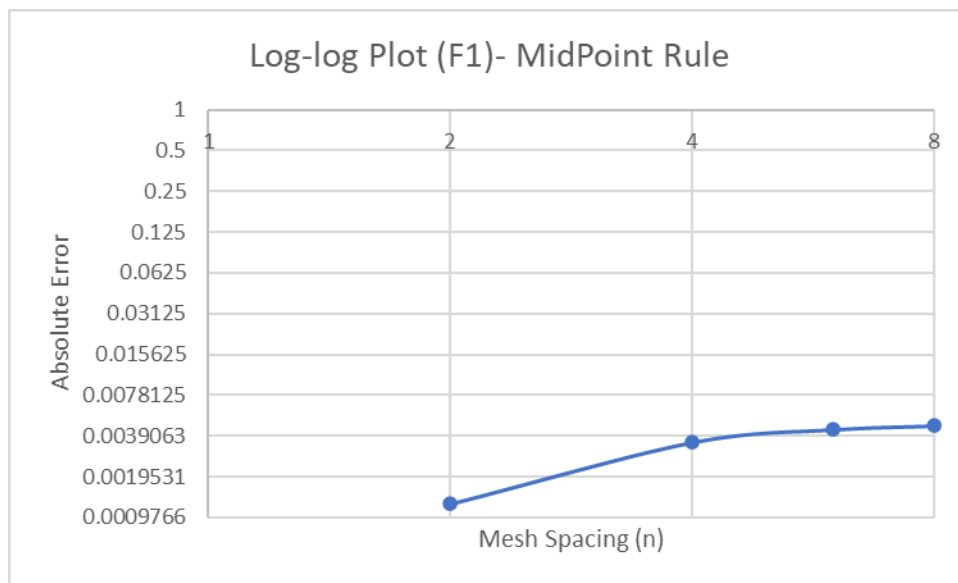


Fig.2- Mid-Point Rule

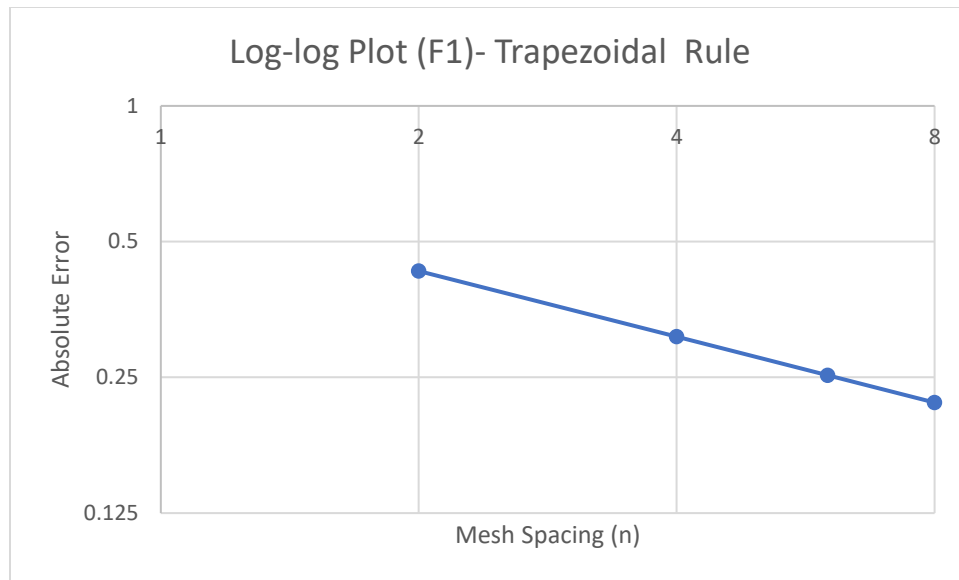


Fig.3- Trapezoidal Rule

(b) Log-log plots were made for  $\sqrt{\coth(x)}$ =(F2) using various integration schemes from 0 to 1

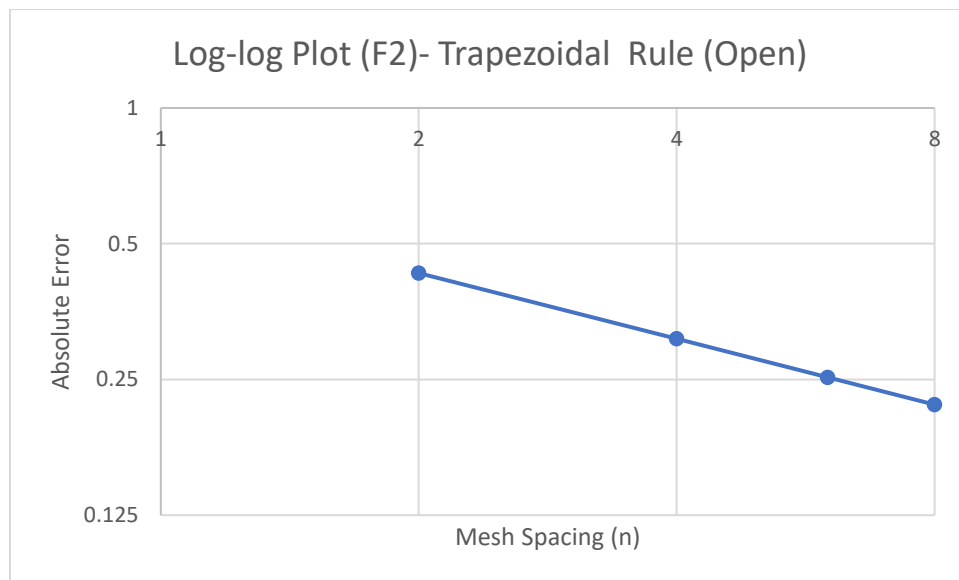


Fig.4- Trapezoidal Rule (Open)

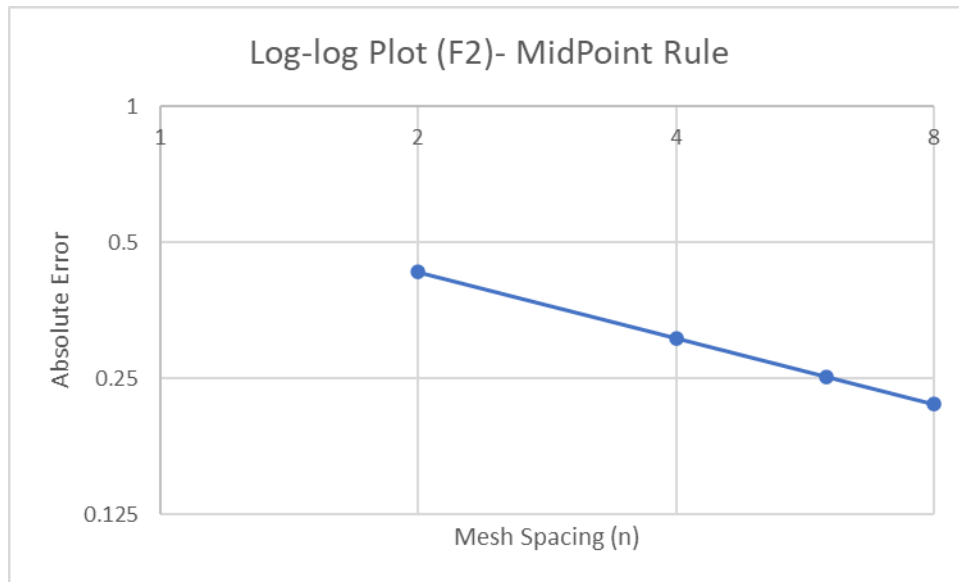
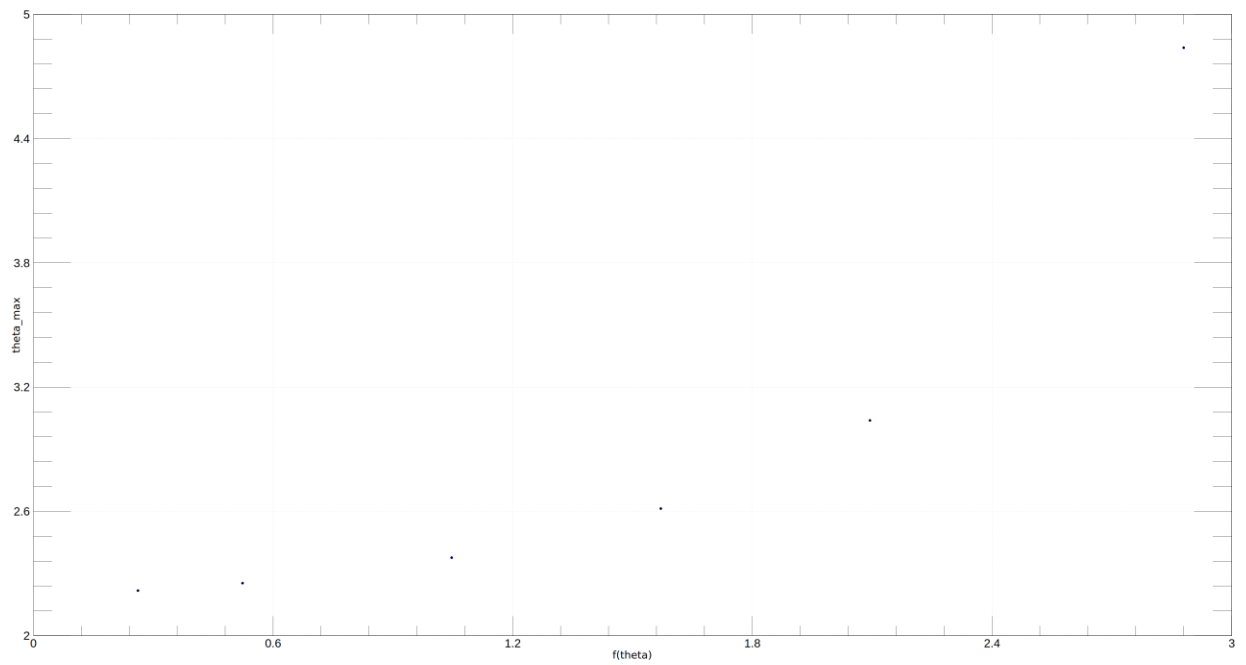


Fig.5- Mid-Point Rule

2. Plots for Q2 for different values of theta max is given as:



6. The minimum points needed for solution were 6. There was still a linking error with the Gauss libraries. Code has been loaded to github.