

Math 2260 Quiz 19.5 (Practice)

Name _____

Points will be deducted for untidy or disorganized answers

1. Find a polynomial that will approximate the given function of x throughout the given interval with an error of magnitude less than 10^{-3} .

(a)

$$F(x) = \int_0^x t^2 e^{-t^2} dt, \quad [0, 1]$$

(b)

$$G(x) = \int_0^x \tan^{-1} t dt, \quad [0, 1]$$