1. Evaluate the function and write the code as the “inline” function



for x=1 to x=3 in steps of 0.1, . Use the command plot(x,y) to show the function.

1. Let a matrix B = [ 1.5, 1, 3; 6.5, -1.2, 12.4; 2.5, -1, 3.8; 2.4, 8.1, 5.8]. Use MATLAB to compute the following:
2. the maximum matrix element value in each row and column of matrix B,
3. the minimum matrix element value of matrix B.
4. Leibnez’s series is given by

Write a MATLAB script file to compute Leibnez’s series summation for 1000 terms by two methods: **(a)** a for-loop construct, **(b)** Use tic and toc to determine the time needed to compute each implementation.

1. **(a)** Suppose that a savings bank offers a tiered rate of interest that increases with the account balance as follows:

Suppose that a customer deposits 7000 for 20 years. Write a MATLAB script to compute the compound balance for years 1 through 20. Display the number of the years, the interest rate, the amount of interest, and the new balance.

(b) Use the MATLAB “input” function to input the variables: customer deposits & year.

(c) Create MATLAB sub-function for the calculation of the balance and keep the input and output part in the main function. In the main function, you can call the sub-function to calculate the balance.