CSCI 2150 Introduction to Scientific Computing

Quiz 3

Total points 30

Write Matlab code for the following:

1. Given the array A = [ 2 4 1 ; 6 7 2 ; 3 5 9], provide the commands needed to

a. Assign the first row of A to a vector called x1

b. Assign the last 2 rows of A to an array called y

c. Compute the sum over the columns of A

d. Compute the sum over the rows of A

e. Compute the sum of squares of first row of A. ... [10]

1. Given x = [4 1 6] and y = [6 2 7], compute the following arrays

a. aij = xiyj

b. bij = xi/yj

c. ci = xiyi, then add up the elements of c.

d. dij = xi/(2 + xi + yj)

e. eij = reciprocal of the lesser of xi and yj ... [10]

1. Plot the function over the interval [0, 2π] ….[5]
2. Find f’(3) for the function f(x) = x^3+3x-1. …..[5]