1. Write a MATLAB script file by using the *for loop* to compute the value of the following function:

,

Where  values from -1 to 2 with an increment of 0.1, in additions, to draw the graph of the .

1. Write a MATLAB SUB-function to evaluate the members of the sequence, where a, and n are the inputs and the sequence value of is the output of this SUB-function and save it as a script file. Then, write a main function to input the range of the value n from 0 to 20, and =2, and call the SUB-function to evaluate the sequence value, and display the value of n and by using *fprintf*, as the following format:

n 

1. 1
2. 2
3. 2
4. 1.33

1. The (x, y) coordinate of an object can be expressed as a function of time t, as follows:



Where 0 ≤ t ≤ 4. Write a program by using the *for loop* that finds the time at which the object is closest to the origin (0, 0) and finds the smallest distance.