1. Suppose that , and *t* = 0:0.2:2, *a* = 5, and *b* = 3. Use MATLAB code to compute the following expression:

**(a)** . (b) 

(c)  (Answer with the program only)

1. Write a MATLAB script file to plot the following mathematical function:

Use the command plot(x,f) to plot this function, for the interval ., in step of 0.1.

1. (a) Use the MATLAB “input” function to input the score of the EE class with variables: N: the number of students, score(1,:) : score of mathematics, score(2,:) : score of English, score(3,:) : score of science.

(b) Create MATLAB sub-function to calculate the weight average (WEAV) of each student, that is WEAV=0.4\* score of mathematics + 0.4\* score of English+0.2\* score of science. Keep the input and output part in the main function and you can call the sub-function to calculate the weight average.

(c) Create another MATLAB sub-function to calculate the maximum, the minimum, and the mean value of each course.

(d) write a main program to call the sub-functions that your write in (b) and (c) and show the result.

1. A mortgage bond (loan) of amount is obtained to buy a house. The interest rate r is 15%. The fixed monthly payment that will pay off the bond loan over N years is given by the formula



1. Write a MATLAB script file to compute with related to N=15 to N=25 in step of 5 years and rate r=0.15 to r=0.2 in step of 0.01. Use “fprintf” to print out the corresponding value for each case of N and r.
2. Use the command plot(N,P) to show the function P(N) at a fixed rate r=0.15.