**Assignment 2**

**(Constant, Variables & Expressions)**

1. Given two sides a=3.2 and b=4.6 of a triangle and angle theta=600 between these two sides, find the length of third side and area of the triangle.
2. Write a program to convert temperature given in degree centigrade, say 35.50 C to degree Fahrenheit. (temp in Fahrenheit = 1.8\*temp in degree centigrade +32)
3. Write the Matlab statements to calculate the sum of the series

 for x=1.5

1. The values of a, b, c & d are -190.5\*10-2, 14.6\*103, 0.00056 and 456.28 respectively. Write a program to evaluate the following statements
   1. 
   2. 
2. Given the radius of a circle, r=5 cm, find its circumference and area.
3. Give the base of the right angled triangle =5 cm, and the acute angle, theta =420, find the length of its perpendicular.
4. For an electrical circuit with an inductance L=0.01mH and resistance R=100 Ohms, the damped natural frequency of oscillation is



Write a program to calculate the frequency for different values of C varying from 0.1 to 1 in steps of 0.1.

Answers

1. 4.0841 & 6.3739
2. 95.7200
3. -0.3042
4. -1.3666e+005, 239.2841
5. 31.4159, 78.5398