Programming Mathematics

# Lab 04 Iteration, Taylor Series

n times

For the following the angle is defined in radians, where

1. Create functions which use iteration to calculate the above (limit the number of terms in , and . )
2. Illustrate tests for the above in code.
3. Determine the maximum value of n for which n! may be calculated.
4. For , and . Examine the terms of the series, to see how you might calculate the next term from the last, modify your code to allow your terms to be evaluated indefinitely. (Just comment out previous code)
5. Modify , and so that they stop when the terms get smaller than a specific value.