Written Assignment 11

Due by the beginning *of class on Monday, November 13, 2017.*

1 Introduction to Power Series

Chapter 11.8: 7, 11, 13, 15, 17, 25, 26, 29, 30, 31, 33, 39, 40.

2 Representing Functions as Power Series

Chapter 11.9: 3, 7, 13, 15, 25, 28, 37, 40.

3 Taylor's Theorem & Taylor/MacLaurin Series

Chapter 11.10: 7, 11, 21, 25, 33, 37, 43, 59, 61, 66, 67, 72, 76, 77.

Additional Problem: Compute $e^{\frac{1}{10}}$ with error less than .005 in absolute value, estimating the error with Taylor's Remainder Theorem (since the series does not alternate).

4 Applications of Taylor/MacLaurin Series

Chapter 11.11: 27, 36.