

Homework 8

due November 4, 2015

In addition to

11.5 1, 3, 4, 5, 10, 12, 14, 17, 20, 23, 24, 26, 28, 29, 30, 33

11.6 1, 2, 3, 11, 14, 16, 18, 20, 21, 22, 24, 26, 28, 29, 30, 35, 36, 38, 40, 42

11.7 1, 5, 11, 17, 25, 26, 28, 30, 32, 33

complete #1-20 from the attached problem sheet.

and complete the following problems

Challenge problem. Find the constant c_0 such that the series

$$\sum_{n=0}^{\infty} \frac{n!}{(cn)^n}$$

converges for $0 < c < c_0$ and diverges for $c > c_0$.

TO BE GRADED

11.5 12, 14, 17, 20, 23, 24, 26, 28

11.6 18, 20, 21, 22, 29, 30, 35, 36, 38

11.7 17, 25, 26, 28, 30, 32, 33

“Sample problems” 16-20

Challenge problem