

**Assignment 6** (for discussion and quizzing at tutorial week of Feb 24, but not for hand-in)

Note: The week of Feb 17 is the reading week: NO classes/tutorials/office hours during that week. If you have any questions (regarding the homework, lecture material, etc), please send me emails.

- Read Lecture 6 and sections 4.1-4.4 from the textbook.
- Practice problem set:
  - 4.1: # 3, 5, 7, 9, 17, 23, 31, 37, 43, 44, 49, 53, 57, 59 p 280-281
  - 4.2: # 5, 11, 15, 18, 19, 23, 25 p 288-289
  - 4.3: # 8, 11, 15, 17, 21, 25, 37, 49, 51 p 298-299
  - 4.4: # 9, 13, 15, 17, 22, 25, 33, 39, 42, 45, 49, 55, 61 p 307-308

Extra questions:

1. In class we showed that  $\lim_{x \rightarrow 0} \frac{\sin x}{x} = 1$ . Can you find this limit using L'Hospital's rule?
2. Sketch the graph of  $f(x) = (1 - x)e^x$  (You can use the guidelines of section 4.5).