Homework Assignment for April 10 - April 21, week 14 - 15

Math 2552R, Spring 2017 Prof. Li

Reading Assignment:

• week 14 - 15 Brannan and Boyce (3rd. ed), Sections 2.5, 3.6, 4.4, 4.6, 6.3.

For the following questions, derive the corresponding differential equation in each of the following question on your own if it is given. In the final exam, you will be asked to describe physical situations using differential equations similar to these. Solve each differential equation in addition to the questions asked in the exercises.

- Section 2.5 # 1, 4, 5, 6, 8, 10 -12
- Section 3.4 # 21, 22
- Section 3.6 # 3, 4, 7, 8, 15, 16, 17, 25
- Section 4.4 # 5, 6, 7, 11, 17, 18
- Section 4.6 # 6, 10, 12, 14 (use Laplace transform)
- Section 6.3 # 14, 15, 17.

Quiz 10. April 13, covers Sec. 1.1.

Quiz 11. April 20, covers Sections 2.5, 3.6, 4.4.