## Homework 4A

## Qingyun Zeng MATH 241-910 :Calculus IV

May 31, 2017

**Problem 0.** Reading: section 3.3.2-3.3.5, 3.6, 4.1 in Haberman. *Optional reading:* section 3.4-3.5 in Haberman

Problem 1. Do problem 4 in HW3A.

**Problem 2.** (Fourier series, sine series, and cosine series) Haberman 3.3.1 (a)(c)(d)

**Problem 3.** (equilibrium solution ) Haberman 4.2.1

**Problem 4.** (Convergence of Fourier series) Haberman 3.3.18

*Optional exercise*: Below are exercise proposed in class and some additional problems. These are for your own benefit and may be helpful for your understanding of the material It is not required to turn them in. It is suggested that you at least read those problems.

Due: June 5 (World environment day), 2017, in class