

# Homework 8B

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MATH 241-910 :Calculus IV

June 15, 2017

**Problem 0.** Reading: section 8.6, 10.1-10.3 in Haberman. *Optional reading: Appendix of sec. 10.3: derivation of the inverse Fourier transform of a Gaussian*

**Problem 1.** Haberman 8.2.1 (a)(e)

**Problem 2.** Haberman 8.6.6

**Problem 3.** Haberman 8.6.7

**Problem 4.** Haberman 10.3.6

*Extra credit exercise:*

**Problem A.** I will post some topics before Friday this week. There are two types of extra credit activities: group work with presentations and individual paper. The group work consist of 20-25 minutes presentations as well as a group paper about 5 pages (must be typed (either in  $\text{\LaTeX}$  or Word; could be double spaced). The individual paper is a paper about 5 pages. You need to post your choices of extra credits on the discussion panel of Canvas. The topics are first come first served, that means you need to change the topic once others post to take that topics first. Each group should consist of 3 students. In addition, you have the right to give up this opportunity as well. Good luck!

Due: June 19, 2017, in class