Math 425, Spring 2015   **Jerry L. Kazdan**

Problem Set 5

DUE: Thurs. Feb. 19 in class. [Late papers will be accepted until 1:00 PM Friday.]

This week. Please read the Chapter 5 in the Strauss text.

1. P. 67 #10 Solve this problem in two different ways:
    a) Using the techniques of Sec. 3.2.
    b) Using Fourier series.

2. p. 70 #1

3. p. 71 #2

4. Use Duhamel's Principle to find a formula for a particular solution of $u'' + a^2 u = f(x)$ where $a > 0$ is a constant.

5. p. 79 #2

6. p. 79 #4

7. p. 80 #11

8. p. 89 #1

9. p. 89 #4

10. p. 92 #2

[Last revised: February 13, 2015]