Homework Assignment # 3 Due Friday, October 3, 2003.

Problem 1: Hildebrand, Chapter 9, # 15 Problem 2: Hildebrand, Chapter 9, # 21 Problem 3: Hildebrand, Chapter 9, # 22

## Bonus Problem!

**Problem 4:** Suppose that in plucking a string, you pull it at one point making a broken-line function shape. (For convenience, you may assume the string has length  $\pi$ .)

- a) Does the sound change depending on where you pluck the string? If so, how?
- b) Does the sound change depending on how hard you pluck the string? If so, how?
- c) Is there any difference between striking and plucking the string? If so, what?