## Problem Set # 2

## Due 9/23/09

- 1. Text Problems 3.13
- 2. Two of the simplest utility functions are:
  - 1. Fixed Proportions: U(x, y) = Min[x, y].
  - 2. Perfect Substitutes: U(x, y) = x + y
  - a. For each of these utility functions, compute the following
    - Demand functions for *x* and *y*.
    - Indirect Utility Function
    - Expenditure Function
  - b. Discuss the particular forms of these functions you calculated why do they take the specific forms they do?
- **3.** The Stone-Geary Utility Function is used in many applications.
  - a. Do problem 4.12 in the text
  - b. Read the paper "How Inefficient are Multiple in-kind Transfer Programs?" by Michael Murray.
  - c. Answer the following questions about the Murray paper
    - How does the Equation on page 211 generalize the one in problem 4.12?
    - Explain what Equation 1 on page 212 means (you may wish to consult the appendix for this).
    - Explain the meaning of the figures in Table III. Give a numerical example of what these numbers mean
    - Discuss specifically Murray's results for Medicaid.