

ECON 3070
Spring 2009, Homework 2
Due Tuesday, Feb.10 (prior to
commencement of lecture)

Carefully show how you derive your answer and be sure to interpret your answer where necessary.

1. Solve problem 3.3 a,b, p. 95 (the latest edition) or 3.2 a,b page 93, (the second edition) from the textbook, . In addition, answer
 - c. Are Jimmy's preferences monotone? Why?
2. Solve problem 3.10 a,b,c (the latest edition) or 3.7 a,b,c (the second edition). In addition, answer
 - d. Judy's preferences are represented by a utility function $U(F, C) = \sqrt{FC}$. Do Judy and Julie rank the bundles in a different way (are their preferences different)? Why? Use the indifference map to *illustrate* your answer.
3. Draw the preference maps and calculate marginal rates of substitution for the following utility functions
 - (a) $U(x_1, x_2) = \sqrt{x_1 x_2} + x_1$
 - (b) $U(x_1, x_2) = 5x_2 + x_1$
 - (c) $U(x_1, x_2) = x_1^{1/4} x_2^{1/3}$
4. Solve problem 4.2 from the textbook, (it is on page 129 in the second edition and on page 131 of the latest one).