

Bent E. Sørensen

ECONOMICS 7344 – MACROECONOMIC THEORY II, Spring 2004

Homework 3. Monday February 2, 2004. Due Monday February 9.

1. Romer 6.1. (Note: This demonstrates the workings of Jensen’s inequality. Log-linear approximations used to be so common in rational expectations models that macroeconomists sometimes are jokingly referred to as people who believe “the log of the expectation is the expectation of the log”—such approximations are often impossible to avoid without resorting to simulations—simulations are, however, becoming increasingly popular tools.)

2. Romer 6.2. (Note: This type of Dixit-Stiglitz utility functions and their implied price indices have become standard in macroeconomics, so don’t rush through this exercise, it will be assumed for exams that you know this material well.)