ECON 110, Prof. Hogendorn, Fall 2008

First Midterm Exam

Each part of each question (a, b, c, etc.) is worth 5 points. Make sure to allot your time accordingly. Total of 30 points, -1 for messiness, -2 for extreme messiness.

1. Movies. If you were born in 1990, let’s guess that your parents were college age in 1978 and your grandparents were college age in 1948. Let’s see what has changed since they were kids.

First, some data: with 1983=100, the CPI was 24.1 in 1948, 65.2 in 1978, and it is 207.0 today.

(a) Today it usually costs $7.00 to go to a movie (I know this seems hard to believe, but that is the official statistic). If movie prices follow the CPI, how much did your parents pay in 1978 and your grandparents in 1948?

(b) Actually, the real movie price in 1948 was $0.36 and in 1978 it was $2.34. What was the approximate yearly percentage inflation between 1948 and 1978, and 1978 and 2008, using the CPI? Using the actual movie prices?

(c) What is wrong with the following statement: “Since movie prices are a part of the CPI, but they don’t go up at the same exact rate as the CPI, the CPI must not be calculated correctly.”
2. *Fluff.* Fluff toys are very popular. Originally they sold for $35 each, but the manufacturer has run out. So now, the only way to get one is on eBay, where the equilibrium price is $100 and the quantity is 5000.

(a) Draw a graph of the supply and demand curves in the eBay market. Assume a linear demand curve and an inelastic (but not perfectly inelastic) supply curve. Label the consumer and producer surpluses.

(b) Suppose that at equilibrium, the price elasticity of demand on eBay is $\varepsilon = -1.2$. How many would people want to buy at the official retail price of $35$?

(c) Show what would happen if a government law prohibited sales at prices above the official retail price. Label the changes in producer and consumer surplus under the law. Label the deadweight loss.