FE341: Microeconomics
Homework 1
Due August 30th

1. From the textbook page 18: Questions for Review #2

Which of the following two statements involves positive economic analysis and which normative? How do the two kinds of analysis differ?

a. Gasoline rationing (allocating to each individual a maximum amount of gasoline that can be purchased each year) is poor social policy because it interferes with the workings of the competitive market system.
b. Gasoline rationing is a policy under which more people are made worse off than are made better off.

2. From the textbook page 18: Questions for Review #6

The price of long-distance telephone service fell from 40 cents per minute in 1996 to 22 cents per minute in 1999, a 45-percent (18 cents/40 cents) decrease. The CPI increased by 10 percent over this period. What happened to the real price of telephone service?

3. From the textbook page 57: Questions for Review #2

Use supply and demand curves to illustrate how each of the following events would affect the price of butter bought and sold: (a) an increase in the price of margarine; (b) an increase in the price of milk; (c) a decrease in average income levels.

4. From the textbook page 58: Questions for Review #7

Are the following statements true or false? Explain your answers.

a. The elasticity of demand is the same as the slope of the demand curve.
b. The cross-price elasticity will always be positive.
c. The supply of apartments is more inelastic in the short run than in the long run.

5. From the textbook page 59: Exercises #6

The rent control agency of New York City has found that aggregate demand is $Q_D = 160 - 8P$. Quantity is measured in tens of thousands of apartments. Price, the average monthly rental rate, is measured in hundreds of dollars. The agency also noted that the increase in Q at lower P results from more three-person families coming into the city from Long Island and demanding apartments. The city's board of realtors acknowledges that this is a good demand estimate and has shown that supply is $Q_S = 70 + 7P$.

a. If both the agency and the board are right about demand and supply, what is the free-market price? What is the change in city population if the agency sets a maximum average monthly rent of $300 and all those who cannot find an apartment leave the city?
b. Suppose the agency bows to the wishes of the board and sets a rental of $900 per month on all apartments to allow landlords a "fair" rate of return. If 50 percent of any long-run increases in apartment offerings comes from new construction, how many apartments are constructed?

6. From the textbook page 59: Exercises #7

In 1998, Americans smoked 470 billion cigarettes, or 23.5 billion packs of cigarettes. The average retail price was $2 per pack. Statistical studies have shown that the price elasticity of demand is -0.4, and the price elasticity of supply is 0.5. Using this information, derive linear demand and supply curves for the cigarette market.