ECO 610-401
Problem Set #1
Fall 2002

DUE: beginning of class, Monday, 9/30/02.

1. 2-6, p. 57

2. 2-12, p. 59

3. 3-2, p. 118

4. 3-6(b), p. 120

5. 3-14, p. 121

6. You own and operate a chain of video rental stores. At a typical store, weekly rentals average 4000 when you charge $3.00. As an experiment you decide to reduce the price at one of your stores to $2.00 per video. After things settle down, you find that average rentals have increased to 5000 per week.

(a) Calculate the own-price elasticity of demand for video rentals. Show your work.

(b) Suppose your total costs are the same whether you rent 4000 or 5000 videos per week. Use your answer in (a) to explain whether to charge $2 or $3.

(c) A candidate for mayor announces that if she is elected, she will propose a $1.00 per video rental tax in order to raise money for a new arts center. From industry trade journals you know that the income elasticity of demand for video rentals is 0.5. Use that information to evaluate the progressivity or regressivity of the proposed tax. Could you then come up with a better argument against the tax other than that it will hurt wealthy owners of video rental stores like you?

7. Ralph and Gordon, owners of a local grocery store, are currently pricing their milk at $2.00 per gallon, a 15% markup over cost. However, they have experimented with other prices. They have found that a price increase to $2.20 reduces sales by 40% while a price decrease to $1.80 increases sales by 40%. Given this information, should Ralph and Gordon raise, lower, or keep their price at $2.00? Explain your answer.