100 points. Please write answers in ink. Use pencil for drawing graphs. Allocate your time efficiently. Good Luck.

1. a. Illustrate and explain the price searcher’s optimum price and quantity to produce. On the same graph show the competitive price and output. Show the buyers’ gains, the seller’s gains, to total expenditure by consumers, and the deadweight loss. Explain why the price searcher’s optimum choice of price and quantity results in a deadweight loss.

b. Suppose that this price searcher is the only firm in a new market as a result of an innovation by an entrepreneur. That is, the entrepreneur has secured a monopoly position by being the first entrant to market that did not previously exist. Would it be appropriate to claim that the government should pursue policies to try to eliminate the deadweight loss? Explain.

2. Read the article "Unilever Churns Up Battle With Quebec Over Its Margarine," Wall Street Journal (25 November 1997, p. B12). Explain who benefits from Quebec’s ban on yellow margarine. Who is harmed? What theory of regulation best explains the law that prevents the sale of yellow-colored margarine in Quebec? Why does the Quebec government continue to prevent the sale of yellow margarine?

3. The graph in Figure 9-8 presents the daily demand for round-trip tickets on Transcontinental Airline’s flights between St. Louis and New York City and between Los Angeles and NYC. Assume that the cost to TA of carrying an additional passenger is $25 one way, for a round-trip marginal cost of $50.

a. What specific expenses would enter into TA's marginal cost (of selling a round-trip ticket)?

b. Construct the marginal revenue curves that correspond to each of the demand curves shown, using the technique we described in class.

c. How many tickets would TA want to sell on each flight to maximize its net revenue?

d. What price would it want to set on each route?

e. Are St. Louis customers subsidizing Los Angeles customer? What price would TA want to set for its St. Louis flights if it shut down its LA operation? What price would TA want to set for its LA flights if it shut down its St. Louis operation? Are St. Louis prices higher because LA prices are lower?

f. Are St. Louis prices perhaps lower because of TA’s LA operation? Since TA is adding to its net revenue by flying LA passengers, it could be the case that the LA operation is enabling it to stay in business. How would this contribute to lower prices for St. Louis passengers?
4. The figures below illustrate the demand, marginal revenue, and marginal cost curves for a price searcher.

a. Indicate the firm’s maximizing price and quantity of output.

b. In the first figure, indicate the firm’s producer surplus, the buyers’ consumer surplus, and the deadweight loss.

c. Explain how this price searcher might be able to increase its producer surplus, increase consumers’ surplus, and reduce the deadweight loss—all at the same time. Illustrate this in the second figure.