Write your name on the cover of the test booklet and nowhere else. Enclose this sheet with the booklet. Failure to follow these directions will cost you 1 point. The test has 100 points (to be scaled up to 170 points) and is scheduled to take 50 minutes. Therefore, expect to spend 1 minute for every 2 points. For example, a 12-point question should take 6 minutes. I cannot give extra time because some students have a class after your class.

1) (14 points) Answer EITHER Part A OR Part B.
A) Explain why restaurants give senior citizen discounts. Why don't grocery stores do give that discount?
B) Give an example of first degree price discrimination. Without using a graph, explain why that type of monopolist produces more efficiently than a non-discriminating monopoly.

2) (14 points) Answer EITHER Part A OR Part B.
A) Suppose a firm sells its good for $50 and its marginal cost is $45. What is its Lerner Index? Does this company have much monopoly power? Explain your logic and show all calculations.
B) When there is a situation where there is a natural monopoly, the government often uses a rate-of-return regulation. How can that regulation make a firm produce closer to the efficient point? What is the problem with that type of regulation?

3) (24 points) Answer EITHER Part A OR Part B.
A) Draw the D/MC/ATC/AVC diagram for a monopoly. Find the quantity produced, the price charged, the consumer surplus, producer surplus or profits, and dead-weight loss. BRIEFLY state how you found each item. (Producer surplus and profits are different. I am only asking for one of them.)
B) Draw the MC/ATC/AVC/D diagram for a monopolistically competitive firm which is making positive profits. Find the quantity produced, price charged, and the profits. Explain how you found them. Show what happens over time to the diagram. Explain why the curve(s) moved as drawn.

4) (24 points) Answer EITHER Part A OR Part B.
A) Draw the diagram for the monopsony. Find the quantity sold, price charged, producer surplus, consumer surplus, and deadweight loss. Briefly state how you found each of those values and why you labeled the lines what you did rather than MC, D, and something else.
B) Suppose two firms in an Cournot-Nash duopoly have constant marginal costs of $4/unit. The products are identical and the demand for the industry is given by $Q_I = 10 - \frac{1}{4}P$. Draw the diagram necessary to derive the reaction functions (a.k.a., best response functions). Explain how you got the diagram. Draw the reaction functions explaining how you found them. Find the Cournot-Nash equilibrium outputs and price. Explain how you found them.

5) (24 points) Answer EITHER Part A OR Part B.
A) You can buy Nyquil and Dayquil separately or as a pair. Suppose the price of a bottle of Nyquil is $4.00/bottle and Dayquil costs $5.00/bottle. If you buy them as a pair, it costs $6.00/pair. Draw the diagram which determines who will buy neither, only Dayquil, only Nyquil, and both. Briefly explain how you found where each of the lines goes and why you labeled each area as you did.
B) Draw two demand curves for a firm which can divide the markets. Have the two demand curves cross. Draw an upward sloping marginal cost curve. Draw the necessary line(s) to determine how much the firm will sell in each market and how much they will charge in each market. Briefly explain how you found each.