## Economics 580

## Problem Set #1

(due next week)

Part I: Write an essay (in English) to discuss Market Power. You may describe (a) what market power is, (b) how market power is often generated, (c) why and who care about market power, (d) how economists usually measure market power, and so on. Requirements: single-space, 12 font size, 3-5 pages, no math equations, and proper citations. Late submission is not accepted.

Part II: Select one article from newspapers or business magzines that you find interesting, and discuss (in half to one page) the extent to which the article is related to antitrust laws and competiton policy. Attach a hard copy of the article.

Part III: Let market demand be given by Q = 200 - P. Each firm's cost function is  $C(q_i) = 20q_i$ , where i = 1, 2.

- 1. Using the Cournot model (with quantity competition), find each firm's output, price and profit.
- 2. Suppose that the duopolists collude or merge to become one firm (monopoly) and the cost function does not change. Find their joint profit-maximizing (monopoly) price, output, and profit.
- 3. Compute and compare consumers' surplus and deadweight losses of both cases. What do you conclude from this exercise and to what extent is your conclusion general (i.e., not specific to the functional forms of the demand and cost functions, and the number of firms)?
- 4. Discuss generally the benefts and costs of monopoly.