U C Berkeley
Economics 121
Spring 2006
Professor Joseph Farrell

Problem Set 1—answers due **at the beginning of class** January 31. This problem set is meant to be pretty routine; later assignments will be more challenging. Feel free to discuss the problems with other students in the class, but you should write your own answers. Show your work.

1. Describe two possible benefits of competition other than price being close to marginal cost. State briefly what is assumed in attributing the benefits that you mention to competition.
2. A firm has marginal cost of $3 per widget, and sets its price at $5. It estimates that its demand elasticity is 2. Would you advise it to change its price, and if so in which direction? Explain.
3. The gross margin (Lerner index) in an industry is 0.3, until a price comparison web site opens up and sharpens competition, after which the gross margin falls to 0.25. Estimate the decrease in deadweight loss as a function of industry revenue, using the formula discussed in class or otherwise (explain).
4. In Carlton and Perloff, their Equation (3.1) and the discussion around it and in Table 3.1 take $\eta_0 = 0$. What value would replace the entry (there is only one) of "- 10" in Table 3.1 if instead $\eta_0 = 0.2$?

FIRST MIDTERM will be in class, February 9. It will cover all the material discussed in class or in assigned readings up to that date.