

Name _____

February 22, 2001

Pledge: *No Aid; No Violations*

Sign _____

Quiz #1

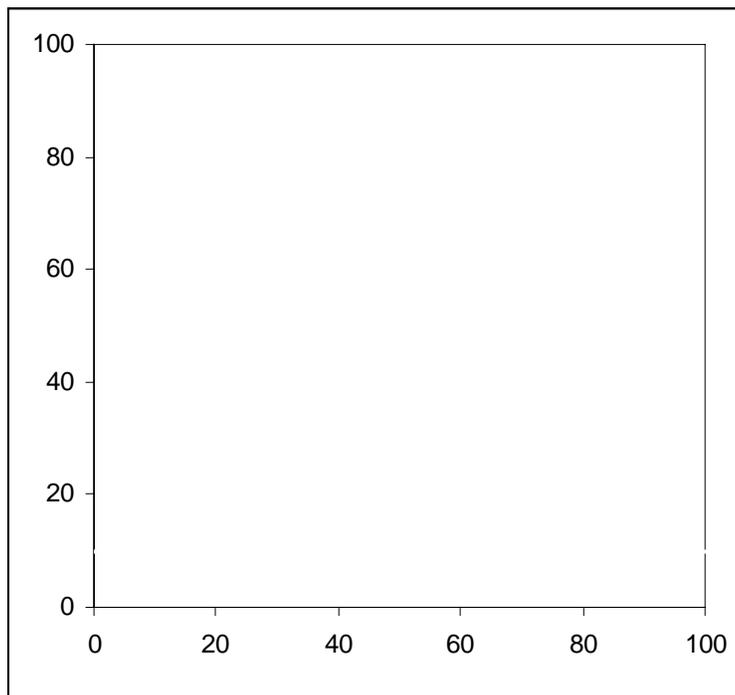
Note:

- The examination will end at 11:20.
- Please answer in the space provided, or continue on the back of the page.
- Show your calculations in order that you may receive partial credit even if you make a numerical error.
- After you finish the exam, please check over your work carefully.
- You may turn in the exam and leave the room when you have finished – but please depart quietly.

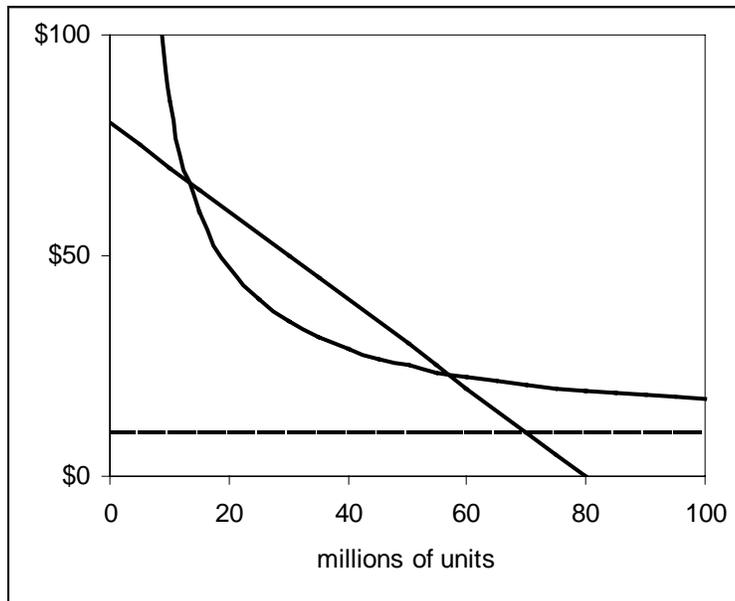
Please answer any three (only 3) of the following four questions.

(If you answer all four, your grade will be based on your answer to the first three questions)

1. Five citizens live in Econoland. Their incomes are \$10, \$20, \$30, \$40 and \$50.
 - a. Plot the Lorenz curve for Econoland. Show your computations. Label everything
 - b. Then briefly explain how the Gini coefficient is calculated and estimate its approximate value from your graph. What does the Gini coefficient measure?
 - c. Does the distribution of income in Econoland appear to be more or less unequal or about the same as that of the United States?



3. The graph shows the market for a new Miracle Drug marketed in Never-Never Land by Hizer Pharmaceuticals. The total cost function for the drug is $C = \$750 \text{ million} + \$10q$, where q is millions of units produced and the C is total cost. Hizer Drug explains that the \$750 million represents the costs of development and testing of the new drug. The demand for the drug is $q = 80 - p$.
- Draw the marginal revenue curve on the graph. If the company is given an exclusive patent to market the drug, what price will the profit maximizing monopolist charge? How much will the monopolist sell? How much profit will the firm make and how much consumer surplus will be realized?. You may carefully indicate the relevant points and areas on the graph OR calculate their precise magnitude.
 - Congressman Bull Horn, concerned that many cannot afford the drug, proposes that the government pay a subsidy of \$5 to be paid directly to the patients purchasing the drug. What price would the profit maximizing monopolist charge and how much would it sell if this proposal is adopted? How much profit will the firm make and how big will consumer surplus become? Would Congressman Bull Horn's proposal improve the general welfare? Explain!
 - Can you think of an alternative procedure that is better than Bull Horn's? Explain your procedure and show why it is better than Bull Horn's.



4. The graph shows the distribution of voter preferences for annual expenditures per pupil, taking into account both the benefit of the expenditures and the resulting tax cost. What level of school expenditure would be predicted by Harold Hotelling and his followers. Explain.

