

Second Exam

Write all answers in your blue book and show all work there.
Return your exam in your blue book.

22 pts.

1. Arnold consumes only two goods, steak and potatoes. Potatoes are a Giffen good.
 - a) In October Arnold gives up a high paying film career for a lower paying administrative job. Draw a well-labeled diagram of his utility maximizing combination of steak and potatoes before and after the job change. Be sure to take account of the potato's Giffen nature.
 - b) Draw a well-labeled diagram of Arnold's Engels curve for potatoes that follows from part a.
 - c) In November, the price of potatoes increases. Use well-labeled diagram to show the effect on Arnold's potato consumption, taking care to break the change down into its two components, the income and substitution effects.

12 pts.

- a) Suppose that President W. has engaged the country in a conflict that was initially to cost no more than 50 billion dollars. And say that it has already cost 75 billion and is now expected to cost at least that much more. In making the decision to continue or not, should the President balance the benefit of continuation against 75 billion dollars or 150 billion dollars? Explain.
- b) The threat from terrorists has increased insurance premiums for all airlines. Will this drive prices up in the short run? In the long run? Explain.

22 pts.

- 3) Consider these two production functions for a good that come from technologies A and B.

$$Q_A = L^{1/2}K^{1/2} \text{ and } Q_B = L^2K^2$$

- a) Which technology will give you lower cost? Why?
- b) Which production function is homogeneous to the fourth degree? Why?
- c) Find the MP_L for technology B when $K=2$ and $L=3$.
- d) Find MC for part c values when $P_L = 10$.
- e) Find Q_B when $K=2$ and $L=3$.
- f) If $P_L = 10$ and $P_K = 10$, is $K=2$ and $L=3$ the least cost way to produce Q_B in part e. Why?

22 pts.

- 4 a) Use a well-labeled diagram to show the effect of an increase in fixed cost on price in both the long run and short run in an increasing cost competitive industry.
b) Show the long run supply curve at each cost level.

22 pts.

5. a) Suppose that the supply of health care is highly elastic in the long run and that demand is not sensitive to price at all, because the government pays everyone's medical bills. Draw a well-labeled supply and demand diagram that depicts this situation with an equilibrium price.
b) Now suppose that to hold down health expenses the government sets the prices that it pays providers lower than in part a. Use your part a diagram to identify problems that will arise due this program.
c) Given the information regarding demand in part a, is it possible to say anything about deadweight loss or economic efficiency of the policy in part b? Why?

I have neither given nor received unfair aid on this test nor am I aware of anyone else who has.
