Econ 3303 Fall 2011
Intermediate Microeconomics R. Claycombe

Second Exam

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

9 pts.
1) Lindsay has paid her lawyers a million in legal fees and hasn't yet gone to trial. It now seems that completion of the trial will cost another million and surely result in acquittal and a movie deal for 1.5 million. If she gives up on her defense and the lawyers expense, she loses the movie deal. Just based on these figures, what should she do? Explain.

27 pts.
2) Suppose $Q = L^{1/3}K^{1/2}$
a) Find MP_L when L = 125 and K = 25.
b) Find MRTS when L = 125 and K = 25.
c) Sketch an isoquant that L = 125 and K = 25 put us on. What is the Q? How does the MRTS relate to the diagram?
d) If $P_L = 2$, find SRMC when L = 125 and K = 25.
e) Draw a well-labeled diagram showing the SRMC curve for the facts above.

18 pts.
3) When demand is low factor prices are low and $AC = 5 - .1Q + .01Q^2$. When demand is high and firms enter, factor prices are high and $AC = 8 - .1Q + .01Q^2$.
a) Draw a two-frame diagram for a competitive market that shows these curves and a LR supply curve that goes with them.
b) Find price when demand is "low" and "high" and put them in the diagram as long run equilibriums.

10 pts.
4) Draw a well-labeled diagram that shows the welfare effects of a tariff in a market with both domestic and foreign production.

18 pts.
5) a) Draw an Edgeworth box that illustrates an endowment point, region of mutual advantage, contract curve and production possibilities curves. Be sure to label these things.
b) What happens to the diagram if productivity increases?

18 pts.
6. If
If $TC = (10 + 2Q)^2$
a) Find the MC equation, using the chain rule.
b) Use a total differential to show that $MRTS = -MP_L/MP_K$

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

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