Wilf Csaplar Jr.

Economics 477

Homework #4

Note that this has been changed to a due date of Tuesday in order for me to turn this back Thursday 10/3, so that the take-home exam can be handed in Tuesday 10/8, so I can grade it in time for early warning grades to be turned in later that week.

Do not write your name on the assignment. Write your name only on the back of this sheet of paper and staple your answers on the front of this sheet of paper. Failure to follow these directions will cost you 1 point on the assignment.

1) I believe that this should work for the Cournot, which means it probably won't for Von Stackleberg. I have tried to test the former and it appears to work. A) (40 points) Find the equilibrium outputs for the two Cournot firms if they face demand given by $P = 701 - 2Q_1 - 2Q_2$. Both cost curves are given by $TC = Q + Q^2/2$. Show enough work so that I can follow it. Also, find the price and profits for the firms. B) (30 points) Find the Von Stackleberg equilibrium levels of output for the follower and the leader. Show enough work so that I can follow what you did.

2) (15 points) Why does the leader in the Von Stackleberg have a greater output than both of the firms in the Cournot model?

3) (15 points) Is the Von Stackleberg model a Nash model? Why or why not?