

Do not put your name anywhere on the assignment, other than on the back of this sheet of paper. Staple your answers on the front of this sheet of paper. Failure to follow these directions will cost you 1 point. Your assignment will be typed, except graphs can be drawn by hand and mathematical equations can be done by hand. Failure to type it will cost you 10 points. If you do double-sided printing or print on the back of scrap paper, I will give you one additional point.

1) (15 points) Why does the leader in the Von Stackleberg have a greater output than both of the firms in the Cournot model?

2) (15 points) Why is the industry output in the Von Stackleberg model larger than the industry output in the Cournot model.

2) (20 points) Is the Von Stackleberg model a Nash model? Why or why not? Is the Cournot model a Nash Model? Why or why not?

3A) (35 points) Suppose your income this year is expected to be 100 and next year it will be 132. If your utility function is $U(C_1, C_2) = (C_1 * C_2)^{1/3}$. Use the Lagrangian method to find the amount of consumption you would do in each period if the interest rate is 10%.

B) (15 points) What is the opportunity costs of consuming today? Explain your logic.