This review sheet is intended to cover everything that could be on the exam; however, it is possible that I will have accidentally left something off. You are still responsible for everything in the chapters covered except anything that I explicitly say you are not responsible for. Therefore, if I left something off of this sheet, it can still be on the exam. There will be no multiple-choice questions. Most of the questions will be like the ones in the homework assignments, and possibly a few definition questions, but I am more likely to ask questions that make you use the definitions rather than recite them. I will probably ask one of the questions from the book at the end of the chapters.

The review session will be Monday, 9/29, at a 5:30, in the normal room. (I hope.)
Basically, know the items on the help sheets. For the last help sheet, here are some questions that will be gone over on 9/23 in class.

1) (40 points) Use the following payoff matrix to find the Nash equilibrium and the cooperative equilibrium. Explain how you get each of them. If they are different, explain why they are different. If they are the same, explain why they are the same. Find if either person has a dominant strategy. Explain your logic. What are each player's safe (loss minimizing) strategy? Explain your logic.

| Payoff Matrix |  | Less Than Jake |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Medium Price |  | Very Low Price |
|  |  | 4 | 14 | 7 | 13 |
|  | $\begin{aligned} & 0.0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \end{aligned}$ | 3 | 8 | 9 | 10 |

2) (10 points) Suppose I gave you a $7 \times 8$ payoff matrix. What is the most possible Nash equilibria if all entries are different? Explain your logic.
3) (30 points) Create a payoff matrix where there is no Nash equilibrium. Prove it has no equilibrium.
4) (20 points) Prior to Nash, and still in many parts of economics, it is assumed that individuals working for their own betterment, will work for the best of society. How did Nash prove this wrong? Use a payoff matrix in your answer.
