This review sheet is intended to cover everything that could be on the exam. However, it is possible that I may have inadvertently overlooked something. 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 on the homework assignments, and possibly a few definition questions. I am more likely to ask questions that make you use definitions rather than have you recite them. I will probably ask one of the questions from the book at the end of the chapters.

**I expect that the review session for this class will be Sunday, 2/29, at 7:00, in Richardson 21 (not the normal room).**

Chapter 3's appendix: Know the properties of indifference curves and why they have those properties. Know how to manipulate the indifference curve/budget constraint diagram to illustrate changes in price and/or income. Know what the slopes of the two types of curves are. Know how to find the income and substitution effects and how to derive the demand for a good. Hints: There are an infinite number of indifference curves and they do not move unless tastes change. Therefore, in this course, they will not be moving. **You will move to a different indifference curve, not move the indifference curve.** The income effect assumes the real income has changed. That is a parallel movement of the budget constraint because the relative price has not changed. The substitution effect assumes the real income is the same, so you must stay on the same indifference curve. When drawing the income and substitution effects, all three points, A, B, and C, must be on different budget constraints. Do not draw two of them on the same budget constraint. Do not have indifference curves cross or slope up.

Chapter 4: Note that most of this chapter is thrown out because the topic would require more than two chapters to cover adequately, but you should know how to interpret results that are given to you. Therefore, if it is not listed here, you are not responsible for it. What is the identification problem? What are the advantages and disadvantages of consumer surveys, observational research, consumer clinics, and market experiments? Understand that a regression is trying to find the line with the equation $Y = \alpha_0 + \alpha_1 X_1 + \alpha_2 X_2 + \alpha_3 X_3 + \ldots$ The X's are the data you are using to do the predictions and the Y is what you are trying to predict. So Y is usually $Q_D$ and the X's are usually variables like price, income, other prices, etc. The equation is a straight line and the $\alpha$'s are the numbers that the computer calculates. Know what the *Adjusted $R^2$*, *Significance of F*, *t-statistic*, *P-value*, and what the *coefficients* mean and how to use them. Basically, know what we did on assignment #4, question #4.

Chapter 6, sections 1 - 3: What are the production function, fixed inputs, variable inputs, short-run, long-run, $TP_L$, $MP_L$, and $AP_L$ are. Why do the three graphs look as drawn? What are the $MRP_L$ and the $MRC_L$ and why should they be equal?

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This is the non-graded assignment #4A that will be covered with assignment #4.

1) (45 points) Draw the $TP_L$, $MP_L$, and $AP_L$ diagrams for a firm. Illustrate an increase in the amount of capital the firm has. Explain why the curve(s) moved as drawn.

2) (20 points) Draw the $MP_L$ curve and explain why it takes that shape.

3) (15 points) Why should the $MRP_L = MRC_L$? Explain your logic.

4) (20 points) If the $TP_L$ function is $Q = (-L^3)/3 + 20L^2 + 600L$. Find the $MP_L$ and $AP_L$. Show all work and briefly explain what you did.