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 at a time to be determined in class, probably Sunday 11/3 in the normal room.

Chapter 5 starting on Page 166: Be able to draw the **diagram of probability vs. payoff**. Know what the **utility function of income** looks like for a **risk averse** person, a **risk neutral** person, and a **risk loving** person. Be able to find the **risk premium** from that graph. Understand the shape of the indifference curves when income is on the vertical axis and standard deviation of income is on the horizontal axis. How can you use **diversification, negatively correlated variables**, and **mutual funds** to reduce risk. What does **actuarially fair** mean? Do insurance companies act that way? Why or why not? Be able to calculate the **value of information** for an example like the one on Page 174. What are **risky assets** and **riskless assets**? Understand the differences between **expected return, actual return, real return, riskless return, market return,** and **portfolio return**. Be able to use a graph like the one on Pages 181 and 182 of income, risk and indifference curves to estimate the portfolio return and the standard deviation of the portfolio. How can you get a higher return than the market return on that graph? What are the **reference point, endowment effect, loss aversion,** and **anchoring** and how to they relate to behavioral economics?

Chapter 6: What are the **production function** and **factors of production**? What is the difference between **long-run** and **short-run**? Be able to fill in a **table for TPL, APL, and MPL** and be able to calculate APL and MPL from TPL. Be able to show movements of the **TPL, APL, and MPL graphs**. Be able to draw **standard isoquants**, **isoquants for perfect substitutes**, and **isoquants for perfect complements a.k.a. fixed proportions**. Understand how we get the slope, and why they look like we drew them. What is the **MRTS**? How do we find **returns to scale**? How can we tell if it is **IRTS, CRTS, or DRTS**?

Chapter 7 until Page 247: What is the difference between **accounting costs, economic costs, sunk costs, fixed costs,** and **variable costs.** How do **opportunity costs** enter the picture? Be able to fill in a **table with Q, TC, TFC, TVC, ATC, AFC, AVC, and MC.** Be able to calculate formulas for each of those costs from a total cost function. Be able to **plot all of those curves** and move them. Why is **r = depreciation rate + interest rate**? Be able to draw the **isocost lines** and know how to find the intercepts, slope, and the cost minimizing capital and labor for a particular level of output. Understand how the curves move. Why is the slope = -MRTS? Explain the **equi-marginal principle**. Part of this material was on the old Exam #4.

<div align="center">Non-graded Homework Assignment #7A to be reviewed with Assignment #7.</div>

1) (30 points) Fill in the table to the right. Show all work. If there is no work then explain how you got the entries.

2) (20 points) Draw the AFC/ATC/AVC/AFC/MC diagram. Illustrate an increase in the wage rate the assembly line workers are paid. Explain why the curve(s) moved as drawn.

3) (20 points) Draw the AFC/ATC/AVC/AFC/MC diagram. Illustrate an increase in the salary the top executives are paid. Explain why the curve(s) moved as drawn.

4) (15 points) Draw the TFC/TC/TVC/TFC diagram. Illustrate an increase in the wage rate the assembly line workers are paid. Explain why the curve(s) moved as drawn.

Q	TC	TFC	TVC	ATC	AFC	AVC	MC
0	24						
1			4				
2				15			
3						3	
4							7
	60				4		
			64				14

5) (15 points) Draw an isoquant/iso-cost diagram with normal shaped isoquant for an output of 20 and a wage rate of $10/L and a rental rate of $20/K. Find out how much the total cost of producing 20 is.