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, 11/02 in the normal room.

Chapter 21 starting at Page 539: How do you calculate cross-price elasticity (E_{XY}) using both the point and arc formulas? What does that number tell us about the goods? How do you calculate the income elasticity of demand (E_I) using both formulas? What does that number tell us about the good? How do you calculate the price elasticity of supply using both formulas? What does that tell us about the good? How will that change over time? What does the supply curve look like for the different elasticities?

Chapter 22: What is meant by *economic rent*? How do we estimate it? Note that the graph on page 554 is wrong unless you assume the opportunity costs of the land is zero if not used the way it is being used. What are the advantages and disadvantages of *proprietorships, partnerships,* and *corporations*? What is the difference between *economic profits* and *accounting profits*? How do *length of loan* and *risk* affect the interest rate? How do we estimate the real interest rate from the inflation rate and the nominal interest rate? (Note that it is an estimate and if this was *Principles of Macroeconomics*, then I would teach you the correct way to calculate it.) Know how to use the equation $PV = \frac{FV_t}{(1+i)^t}$. What are the advantages and disadvantages of financing a project using stocks, bonds, and reinvestment? What is the *Theory of Efficient Markets*? Why do we care about *inside information*?

Chapter 23: What is the difference between short-run and long-run? Be able to fill in a table with TPL, APL, and MPL. Also, be able to draw them. Know why they take the shape the take, especially MPL. Be able to fill in a big table with the columns Q, TC, TVC, TFC, ATC, AVC, AFC, and MC. (I may not do them in that order.) Be able to know what the curves should look like and why MC starts where AVC starts, MC goes through the minima of AVC and ATC, when MC is below AVC or ATC, that curve will go down, and when MC is above AVC or ATC, that curve will slope up. I will not ask you to move that diagram, **I may ask you to draw it*** or to find the errors in a graph. Note that pages 590 - 592 will not be on your test, but they may help you to understand how the product of labor curves relate to the cost curves. Pages 593 - 597 will not be on the test. *This is not what I said in class and in Assignment #7, but given the material in Chapter 24, I have decided I have to have you draw the AVC/ATC/MC diagram.

Chapter 24: Understand why MR=MC is profit maximizing for ALL firms regardless of type. What is meant by perfect competition? Why do those firms have MR = AR = P? Be able to find on the MC/ATC/AVC/D/MR diagram: the quantity a firm produces, the price they charge, their profits or their losses. Determine the short-run and long-run shutdown prices. Why do firms shut down then? How do we get the supply curve for a firm? How do we get the industry supply curve from the firms' curves? For pages 619 - 625, only worry about constant cost industries. The increasing and decreasing cost industries are too difficult. Know how the industry and firm supply/demand diagrams inter-relate.

This is the non-graded Assignment #7A that will be reviewed with Assignment #7.

1) (50 points) Draw the short-run supply and demand for a perfectly competitive industry. Beside it draw the ATC/AVC/MC/D/MR diagram for a firm making profits. Show the profits. Explain how you know that area is the profits. Illustrate what will happen over time. Explain why the curves moved as drawn.

2) (15 points) Why do all firms set MR = MC?

3) (20 points) Why do perfectly competitive firms have D = MR and AR = MR?

4) (15 points) What is the short-run shutdown point for a firm? Why is that the shut-down point?