

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 Tues. 4/7 in the Richardson 110.

Chapter 14 starting with 14.2: How does the **labor market diagram** differ for a firm with **monopolistic output market** and a competitive market? How do we find **economic rent**? (It is basically producer surplus except that it is for an input rather than a final product.) Understand the **monopsony power diagram for inputs**. Why does **MV=ME** and **ME=MRP**? Be able to understand how a **floor with monopsony power** will affect the purchases. Note that I added that graph in class and the homework assignment. Understand the **monopolist in the factor market**. How do **labor unions** affect **non-union workers**?

Chapter 15: What are **stocks and flows**? What is the formula for **PDV**? Note that I changed the book's  $R$  to  $r$  and is the **discount rate** which is related to the interest rate. How do we find the **value of lost earnings**? What do the  $g$  and  $m$  mean in the equation? How do we find the **value of a bond**? Do not worry about perpetual bonds because as Oingo Boingo says, "No one lives forever." Understand how to read the information on a bond like on Page 568. Be able to find the **net present value** of a **capital investment**. How can you tell if the investment is a good one? What is the **risk premium**? How does it relate to **diversifiable** and **nondiversifiable risk**? Be able to use the **CAPM** method of finding the  $\beta$  and the discount rate. What does the beta mean? How do consumers determine whether or not to buy a durable good? How do they determine which one is better (for example using the **energy guide**)? How do you determine whether your **human capital** will be worth it? How can you tell how much of an **exhaustible resource** you should take out knowing the present price, the cost of extracting, the future price and the discount rate? The same logic holds for harvesting trees even though they are not exhaustible. Do not worry about the graph on Page 586. Skip section 15.9.

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Non-graded Homework Assignment #6A to be reviewed with Assignment #6.

- 1) (20 points) Suppose a non-renewable resource is currently priced at \$20/unit. The cost of extraction is \$4/unit. Your discount rate is 8%. What is the highest price for next year which will still result in your extracting it now? Show all work and briefly explain your answer.
- 2) (15 points) I said that the logic for when to extract a non-renewable resource is the same logic as when to cut down a tree for harvesting the wood. Explain how they are the same and in what way they are different.
- 3) (25 points) Suppose a gas-guzzling car costs \$5000 less to buy than a fuel efficient car. However, it costs \$900 more per year in gasoline. Suppose you are going to keep the car for 10 years and they both have the same resale value. Set up the equation to calculate the NPV of the fuel efficient car. Explain how you determined what went where. How would you determine which is cheaper to buy without doing the calculations?
- 4) (15 points) Suppose you want a 5% return. How do you determine when to cut the tree down? Assume the price of the wood is not going to change. Explain your logic.
- 5) (25 points) Suppose a person is earning \$50,000 per year. They are killed and the negligent company is ordered to pay the earnings of that person to the widow. If they had lived, their income would have gone up 5% per year and the discount factor is 4%. They would have worked for 15 more years. Set up the equation which would determine how much the widow is owed. Explain how you reach that conclusion.