

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 9/15 in the normal room.

Chapter 1: What are **markets, arbitrage, perfect competition, market price, and extent of a market?** Be able to calculate the **real price** from the **nominal price (CPI)** for the two years.

Chapter 2: Know what moves the **supply and demand curves**. Be able to prove that the **equilibrium** is stable. Be able to calculate the **own-price elasticity of demand, income elasticity of demand, cross-price elasticity of demand, and elasticity of supply** using both the **arc and point formulas**. Understand what the number means, how to use the number and what properties the product has. What do **perfectly elastic** and **perfectly inelastic** demand and supply curves look like? What types of goods have elastic demand, etc.? What happens to the elasticities over time? What do **price ceilings and floors** do to the diagram?

Chapter 3: We will only cover up to Page 92. What does it mean that **utility functions** have **completeness, transitivity, more is better than less (non-satiation), and diminishing marginal utility?** Why can't they cross? Be able to prove that the slope of an **indifference curve** is the negative of the **MRS**. Why do **perfect substitutes** and **perfect complements** have indifference curves with the shapes we drew? What is meant by **cardinal** and **ordinal utility functions?** Be able to draw the **budget constraint** and move it when a price or income changes. What is its slope? Why does the **MRS = the price ratio** for most indifference curve and budget constraint diagrams? When do we get **corner solutions?**

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Non-graded Homework Assignment #2A to be reviewed with Assignment #2.

1) (25 points) Draw the indifference curve/budget constraint diagram which shows that your income is \$100, the price of a magazine subscription is \$20/subscription and the price of a banana is \$2/lb. Prove that your diagram is drawn correctly. Draw an increase in the price of bananas and explain why the line(s) moved as drawn. Given your diagram, are bananas and magazines substitutes or complements? Explain your logic.

2) (20 points) Draw the indifference curve/budget constraint diagram for goods which are perfect complements. Explain why the diagram looks as you drew it.

3) (10 points) What is the slope of the budget constraint which has hats on the vertical axis and telephones on the horizontal axis? Prove your answer is correct.

4) (10 points) Explain the economic reason why  $MU_X/P_X = MU_Y/P_Y$ ?

5) (25 points) Draw the indifference curve/budget constraint diagram which shows that your income is \$100, the price of a card is \$2/card and the price of a book is \$5/book and results in a corner solution where you buy only books. Prove that your diagram is drawn correctly. Explain why you only buy books.

6) (10 points) What is *transitivity* and how does it apply to utility functions?