

Midterm 1 Review Session Q's

Chapter 2 Questions

1. Suppose Joe produces bicycles and sweaters. If he only produces bicycles he can make 200; in he only produces sweaters he can make 50 sweaters.

a) Graph Joe's production possibilities frontier. Assume constant opportunity costs. How would his PPF change if we assumed increasing opportunity costs?

b) What is Joe's opportunity cost of producing bicycles? What is his opportunity cost of producing sweaters?

c) Joe's neighbor Maria also produces bicycles and sweaters; however, Maria can only produce at most 150 bicycles and 75 sweaters at most. Who has the absolute advantage in sweater production? In bicycle production?

d) Who has the comparative advantage in sweater production? In bicycle production?

e) Joe is accidentally bitten by a radioactive spider and, as a result, grows an extra pair of arms. With his extra appendages, Joe can now produce twice as many sweaters and bicycles. Show the effect of Joe's mutation on the graph from part a.

2. Which of the following statements are examples of normative economics?

Which are examples of positive economics?

a) The US should pass a value-added tax, since this is a tax that will work best for the country.

b) A value-added tax will add \$10 billion to the administrative costs of the US tax system.

c) A value-added tax will increase the economic burden of taxes on poor people by 15%.

Chapter 3 Questions

3. Determine how the market supply and demand curves for pizza shift in response to the following events.

- a) The price of cheese increases.
- b) The price of hamburgers, a substitute for pizza, falls.
- c) The price of pizza rises.
- d) The number of consumers in the pizza market falls.

4. Graph your answers for 3a and 3b. What happens if both events occur simultaneously?

Chapter 4 Questions

5. Ron is selling his used Accounting textbook to another student, Angie. The most Angie is willing to pay is \$200 (what it costs to buy the book new) and Ron wants at least \$75 for the book. Eventually they agree on a price of \$125.

- a) What is Ron's individual producer surplus?
- b) What is Angie's individual consumer surplus?
- c) What is the total surplus generated by this transaction?
- d) Suppose the price Ron and Angie agree upon was instead \$100. How do your answers for parts a-c change?

Chapter 5 Questions

6. Complete the following chart:

Situation	This is an example of a 1) Price Floor, 2) Price Ceiling, or 3) Quantity Control or Quota	What must be true for this intervention in the market to be effective?
The government decides to limit the number of taxicab licenses in Chicago		
The minimum price that can be charged for a sports car is set at \$75,000 by the government		
The minimum wage that can be paid to a worker is set at \$10 an hour by the government		
The maximum tuition that can be charged by a public university is set at \$5,000 a year by the government		

7. Suppose the government wants to impose a price floor in the market for butter. Assume that the equilibrium price of butter (without the price floor) is \$5/pound.

a) Graph the effects of a price floor set at \$3.50/pound. Be sure to identify the change in consumer surplus, producer surplus and total surplus (deadweight loss).

b) Graph the effects of a price floor set at \$6/pound. Be sure to identify the change in consumer surplus, producer surplus and total surplus (deadweight loss).

c) How would the answer to part b change if instead the government imposed a quota?

Chapter 6 Questions

8. Answer the following questions:

a) The cross-price elasticity of demand for Coke and Pepsi is 4. If the price of Pepsi increases by 10%, by how much does demand for Coke change? Are Coke and Pepsi substitutes or complements?

b) The income elasticity of demand for mac and cheese is -0.5. If consumer incomes fall by 25%, by how much does demand for mac and cheese change? Is mac and cheese an inferior or normal good?

c) The price elasticity of demand for beer is -2. If the price of beer rises by 5%, by how much does demand for beer change? Is demand for beer elastic, inelastic, or unit-elastic? If producers of beer raise the price of beer by 5%, how does their total revenue from beer sales change?

9. When the price of bourbon is \$20 per bottle, Midge consumes 5 bottles per week. When the price of bourbon is \$25 per bottle, Midge only consumes 4 per week.

- a) Using the midpoint method, what is Midge's price elasticity of demand for bourbon when the price rises from \$20 to \$25?

Suppose the price of bourbon is back down to \$20, Midge is consuming 5 bottles per week, and Midge's income is \$1000. When Midge's income rises to \$1500 her consumption of bourbon increases to 7 bottles per week.

- b) Using the single point method, what is Midge's income elasticity of demand for bourbon when her income rises from \$1000 to \$1500? What kind of good is bourbon?

10. For each of the following pairs of goods, determine which one will have a more elastic demand. Be sure to explain your reasoning.

a) Water versus diamonds

b) Hudson dark wash skinny jeans versus denim pants

c) Salt versus housing

Chapter 7 Questions

11. Suppose that the town of Piedmont is considering imposing an excise tax on alcohol. Show the effects of this tax on consumer surplus, producer surplus and total surplus (deadweight loss).

12. The country of Nauru needs to generate a given amount of tax revenue to pay for new phosphate mining equipment. You, an economic advisor to the government, have been hired to figure out how to generate this tax revenue while minimizing the impact on total surplus. You have two potential goods you can tax: cigarettes or iPads.

a) Which good would you recommend taxing? Why?

b) Given your answer in part a, should the tax be levied on producers or consumers? Explain your answer.

c) Suppose that the supply of cigarettes is elastic relative to demand for cigarettes, but that the supply of iPads is inelastic relative to demand for iPads.

i) Who would bear the burden of an excise tax if it is imposed on cigarette producers? Cigarette consumers?

ii) Who would bear the burden of an excise tax if it is imposed on iPad producers? iPad consumers?

Chapter 8 Questions

13. Suppose the country of Angola is opening to trade in gold.
- a) Suppose that the autarky price of Angolan gold is lower than the world price of gold. Show the effects of opening to trade on Angolan consumer surplus, producer surplus and total surplus.
 - b) How would your answer to part a change if the world price of gold was greater than the autarky price of gold?

14. In response to a flood of cheap solar panel from abroad, the US government imposes an excise tax on imports of solar panels.

a) Show the effects of this import tariff on consumer surplus, producer surplus and total surplus. Who benefits from the import tariff? Who is hurt by the import tariff?