

Write your name on the cover of the test booklet and nowhere else. Enclose this sheet with the booklet. Failure to follow these directions will cost you 1 point. The test has 100 points (to be scaled up to 160 points) and is scheduled to take 50 minutes. Therefore, expect to spend 1 minute for every 2 points. For example, a 12-point question should take 6 minutes. I cannot give extra time because some students have a class after your class.

1) (12 points) Answer EITHER Part A OR Part B.

A) What is the equation for the equi-marginal principle which can be applied to many goods? Explain why it makes economic sense.

B) For the diagram on the back of the exam, Point A is at the intersection of BC_0 and BC_1 . If the consumer is facing budget constraint BC_1 , then they choose Point A. Point B is on BC_0 and Point C is on BC_1 . Given that information, rank the three points from the one they like most to the one they like least. Explain how you determined the ranking.

2) (12 points each) The table on the back of the exam, has the price of vests, price of hats, price of shoes, income, and quantity of vests. Use the table to calculate TWO of the following elasticities. **Briefly** explain how you chose which rows you used. Show all work. Tell me what the number means. (For example, elastic, substitute, inferior, etc.) **You will want to look at Question #3A before answering this question.**

A) Own-price elasticity of demand for vests using arc formula

B) Income elasticity of demand for vests using arc formula

C) Cross-price elasticity for vests and hats using the point formula.

3) (12 points) Answer EITHER Part A OR Part B.

A) For the elasticity which you did **NOT** answer in Question #2, what value would you expect for that elasticity in the real world? Explain how you reached that conclusion.

B) Given one of the elasticities you calculated in Question #2, what change in the relevant price or income would be necessary to get this person to have a 12% increase in their purchases? For example, if you are using your work from Part C, how much would the price of hats have to change to get you to double your purchases of vests. Show all work and briefly explain what you did.

4) (16 points) Answer EITHER Part A OR Part B.

A) Draw the supply/demand diagram for women's cotton dresses. Illustrate the effects of an increase in the price of cotton face masks. Explain why the curve(s) moved as drawn. What happens to the number of dresses sold and the price of a dress?

B) Draw the supply/demand diagram for cars. Illustrate the effects of a decrease in the price of aluminum. Explain why the curve(s) moved as drawn. What happens to the price of a car and the quantity sold?

5) (16 points) Answer EITHER Part A OR Part B.

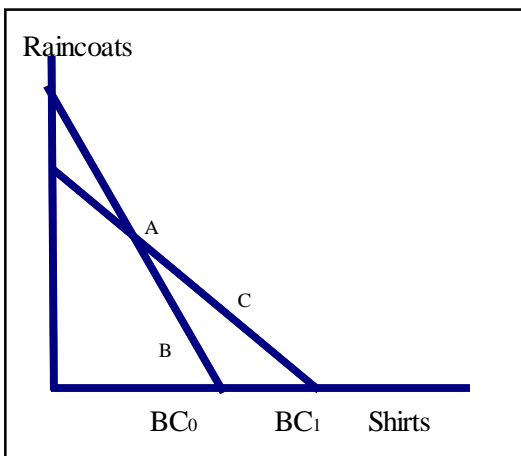
A) Draw three indifference curves which have the top-hats and canes as perfect complements. Explain why the curves look as drawn.

B) Draw three indifference curves for Coke and rum. Draw them such that the person has a strong preference for Coke and gets almost no utility from rum. Explain why your curves look as drawn.

6) (20 points) Answer EITHER Part A OR Part B.

A) Draw a budget constraint/indifference curve diagram for burgers and computers. Illustrate the effects of a decrease in the price of a computer. Explain why the curve(s) moved as drawn. Given your diagram, are computers and burgers substitutes or complements. Briefly explain how you reached that conclusion.

B) Draw a budget constraint/indifference curve diagram for pizza and Chinese food. Illustrate the effects of an increase your income. Draw it so that pizza is an inferior good. Explain why the curve(s) moved as drawn. Briefly explain how your graph show pizzas to be inferior.



| P_V | P_H | P_S | Inc. | Q_V |
|-------|-------|-------|------|-------|
| 20 | 40 | 6 | 200 | 70 |
| 20 | 40 | 4 | 100 | 10 |
| 30 | 40 | 6 | 100 | 10 |
| 30 | 40 | 6 | 200 | 30 |
| 20 | 60 | 4 | 100 | 20 |