

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 170 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) (10 points) For EITHER the elasticity listed in Part A OR the elasticity in Part B. Tell me a value you would expect for it. Explain why you chose that value.

- A) The elasticity of supply of apples this week.
B) The own-price elasticity of demand for Levi's 501 jeans.

2) (10 points) Answer EITHER Part A OR Part B.

- A) According to bls.gov, the CPI using 1983 as the base year was 30 (I rounded from 29.9) in 1961 and 233 in 2013. If a house cost \$30,000 in 1961, how much would that house be in 2013? Show all work and briefly state what you did.
B) Explain why indifference curves cannot cross.

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

- A) What is the slope of a budget constraint for a graph with computers on the vertical axis and doors on the horizontal axis. Prove your answer is correct.
B) Suppose the demand for hats is given by $Q_H = 12 - 3P_H + 0.1I$. If the price of a hat is \$4/hat and income \$300. Calculate EITHER the own-price elasticity of demand OR the income elasticity. Show all work and briefly explain what you did.

4) (14 points each) For **TWO** of the following elasticities, use the table to the right to figure out which pair of rows you can use to calculate the elasticity. Tell me how you decided which rows you used. (Each elasticity has only one pair of rows which is usable.) Calculate the elasticity. Show all work. What does that number tell you? Explain your logic.

- A) Own-price elasticity of demand for bananas using point elasticity.
B) Cross-price elasticity of demand using arc elasticity.
C) Income elasticity of demand for bananas using arc elasticity.

Quantity Oranges	Price of Oranges	Price of Pears	Income
9	2	5	20K
8	4	6	30K
7	5	6	30K
13	5	4	30K
11	2	5	30K

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

- A) Draw the supply and demand for corn-on-the-cob in the grocery store. Illustrate the effects of an increase in the price of ethanol which comes from corn. Explain why the curve(s) moved as drawn. What happens to the price of corn-on-the-cob in the grocery store and quantity sold?
B) Draw the supply and demand for windshields. Illustrate the effect of an increase in the price of windows for the house. Explain why the curve(s) moved as drawn. What happens to the price of windshields and the quantity sold?

6) (24 points) Answer EITHER Part A OR Part B.

- A) Draw three indifference curves for Coke and Pepsi assuming they are identical products. Explain why they take that shape. Draw a budget constraint if you had \$10, Coke cost \$2/bottle, and Pepsi cost \$1/bottle. State how you found the budget constraint. Given your diagram, how much of each do you buy? (Hint: This is much easier than it appears at first.)
B) Draw a budget constraint if your income is \$200, pizzas cost \$10/pizza, and subs cost \$5/sub. State how you found the budget constraint. Draw an increase in the price of pizza to \$20/pizza. Find your consumption point before and after the price increase. Given your diagram, are pizza and subs complements or substitutes? Explain your logic.