

Place your name on the back of this sheet of paper and nowhere else. Staple your answers on the front of this sheet of paper. Failure to follow these directions will cost you 1 point. Your assignment will be typed, except graphs can be drawn by hand and mathematical equations can be done by hand. Failure to type it will cost you 10 points. If you use double-sided printing or print on the back of scrap paper, I will give you one additional point.

Price Oranges	Price Bananas	Income	Quantity Bananas
10	20	10,000	40
30	30	30,000	60
30	20	30,000	100
10	20	20,000	60
20	20	30,000	60

1) (15 points each) For each of the following elasticities, use the table above 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 arc elasticity.
- B) Cross-price elasticity of demand using arc elasticity.
- C) Income elasticity of demand for bananas using point elasticity.

2) (25 points) Suppose the demand for hats is given by $Q_H = 12 - 3P_H - 2P_C + 0.1I$. If the price of a hat is \$4/hat, the price of a coat is \$5/coat, and income \$300. What are the own-price elasticity of demand, the cross-price elasticity of demand, and the income elasticity? Show all work and briefly explain what you did.

3) (10 points each) For each of the following, give me a number which you estimate would be that elasticity. Explain why you chose that number.

- A) Own-price elasticity of gasoline.
- B) Cross-price elasticity of demand between windows and lights.
- C) Income elasticity of demand for lobsters.