

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.

1) (10 points each) For each of the following, give me a number you think would be the elasticity described. Explain your reason for choosing that number.

- A) Cross-price elasticity of cereal and fruit.
- B) Income elasticity of cars.
- C) Cross-price elasticity of pens and pencils.
- D) The income elasticity of a meal at McDonalds.

2) (30 points) Suppose the demand curve for the computers you sell is given by the equation: $Q_C = 1300 - 4P_C - 2P_{TV} + P_P + 0.1I$, where a "C" subscript means "computer", "TV" subscript means "television", "P" subscript means "printer", and "I" stands for income. Suppose that the current price of a computer is \$500/computer, the price of a TV is \$200/TV, the price of a printer is \$100/printer, and the average income of your customers is \$20,000. How many computers do you expect to sell? Show all work. **Use the equation and the values supplied to you to answer the rest of this question, not what you think is true in the real world.** Is the demand for computers elastic or inelastic? Are TVs and computers substitutes or complements? Are Printers and computers substitutes or complements? Are computers inferior, necessities, or luxuries? Explain your logic and show all work for all parts.

3) (30 points) Use the table below to calculate the own-price elasticity of bananas and the cross-price elasticity between oranges and bananas using the point elasticity formula. Calculate the income elasticity of demand for bananas using the arc elasticity formula. Explain how you chose which entries to use for each calculation and tell me what those numbers mean.

P_B	P_O	I	Q_B
3	5	90	10
4	4	90	3
3	4	90	8
4	4	110	7