

If you are not going to be in class on 3/10, turn the assignment in before you leave.

Place your name on the back of this sheet of paper and nowhere else. Staple your answers face up on the front of this sheet of paper. Failure to follow these directions will cost you 10 points. 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) (15 points each) The table to the right can be used to three different elasticities.

However, of the 6 possible pairs of rows only one can be used for each part. Figure out which pair of rows can be used. Explain how you reached that conclusion. Then calculate the requested elasticity. What does that information tell you about the demand for the product(s)? How can you tell? Show all work. Note, the results may not be realistic.

P_{nuts}	P_{pears}	Income	Q_{nuts}
\$2/lb	\$3/lb	\$100	100
\$2/lb	\$5/lb	\$150	120
\$2/lb	\$3/lb	\$150	80
\$6/lb	\$5/lb	\$150	80

- A) E_p using the arc elasticity formula.
- B) Cross-price elasticity using the arc formula.
- C) Income elasticity using the point formula.

2) (10 points each) For each of the following, what value would you expect for the following elasticities? Explain how you decided on that number.

- A) Own-price elasticity of demand for bananas.
- B) E_t for hamburgers.

3) (15 points) What is the equation for utility maximization? Explain why it makes sense.

4) (20 points) Copy the table below onto your answer sheet. (I will not grade what is written here.) Fill it in. Show all calculations. If there is no calculation, then briefly explain how you got the answer. The price of a CD is \$10 each and for a pizza, it is \$8 each. If the person had \$54 of income, how much of each should they buy? Explain how you got the answer.

Q_{CD}	TU_{CD}	MU_{CD}	MU_{CD}/P_{CD}	Q_P	TU_P	MU_P	MU_P/P_P
1	20			1	32		
2		16		2		16	
3			1	3			1
	50	2			60	2	