

ECON 306

Name:

1st Midterm

The questions in the exam total to 100 points. You have until 4:30 to complete the exam. Please show relevant equations and mathematical work where relevant as you may receive partial credit on those problems. Be sure to put your name on the exam!

Short Answer (30 points): Answer each question in 1-2 sentences

1. What is the difference between demand and quantity demanded?
2. What is the technical definition of elasticity?
3. Define opportunity cost
4. Define sunk cost
5. What is the difference between normal goods and inferior goods
6. Define complements and substitutes
7. What does an indifference curve represent

8. What does the marginal rate of substitution mean

9. Define the meaning of “marginal” as used by economists

10. Explain the difference between the substitution effect and the income effect

Long Answer (70 points): Please show your work/logic

1. Draw a basic supply and demand graph for iPhones. Label the axes and the equilibrium (P^* and Q^*). Show on the graph what happens if Apple’s cost of labor rises. If the demand for iPhones was inelastic at the previous equilibrium, will the shift caused by Apple’s rising labor costs increase or decrease their net revenue? Is that the same thing as their profitability? Why or why not? (20 points)

4. Elasticity (20 points)

- a. Draw a demand curve using the equation $Q=75-P$. Label the point **on** the curve where $P=35$ "A" and the point where $P=15$ "B".

- b. What is the numerical elasticity at point A? Is it elastic, inelastic, or unit elastic? How about for point B?

- c. What should the price be in order to maximize revenue? (Hint: when is demand unit elastic?)