Week 4 Discussion Section

Part 1: Revenue and Price Elasticity of Demand

Tea and (English) biscuits are complements. Both have inelastic demand. A flood destroys half the tea crop in India. Use appropriate diagrams to answer the following questions.

1. What happens to the price of tea?

2. What happens to total expenditure on tea? Explain.

3. What happens to the price of biscuits?

4. What happens to the total expenditure on biscuits? Explain.

Part 2: The Midpoint Method

Consider the markets for mobile and landline telephone service. Suppose that when the average income of residents of Plainville is $54,000 per year, the quantity demanded of landline telephone service is 13,000 and the quantity demanded of mobile service is 28,000. Suppose that when the price of mobile service rises from $100 to $120 per month, the quantity demanded of landline service decreases to 11,000 and the quantity demanded of mobile services decreases to 26,000. Suppose also that when the average income increases to $60,000, the quantity demanded of mobile service increases to 32,000.

5. Using the midpoint method, what is the income elasticity of demand for mobile service?

6. Considering the income elasticity, what type of good is mobile telephone service? Explain.

7. Using the midpoint method, what is the cross-price elasticity of demand for landline and mobile service?

8. Considering the cross-price elasticity of demand for mobile and landline telephone service, do the consumers of Plainville regard these goods as substitutes or complements? Explain.

Part 3: Price Elasticity of Demand

Adam and Barb go to the store to purchase some lottery tickets. Without looking at the price, Adam says "I'll take 10 lottery tickets," and Barb says "I'll take $10 worth of lottery tickets."

9. What is Adams's price elasticity of demand for lottery tickets?

10. What is Barb's price elasticity of demand for lottery tickets?

Part 4: Price Elasticity of Supply

Consider the market for original paintings by the deceased artist Vincent Van Gogh.

11. Draw the supply curve for this market, making sure to think about the price elasticity of supply in this market.

12. Suppose there is a decrease in demand for Van Gogh paintings. Determine the impact this will have on the equilibrium price and quantity. Explain.