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Elasticity Practice

Part 1: Practice- *Complete the following.*

1. The price of good E increases by 10% and the quantity supplied increases by 20%. Calculate the price elasticity of supply coefficient. Show your work.

   20%/10% = 2

2. Given your answer to question #1, is the supply for good E perfectly elastic, relatively elastic, unit elastic, relatively inelastic, or perfectly inelastic? Explain how you determined your answer.

   It is relatively elastic because e>2.

3. When the price of good C increases from $20 to $25 the quantity supplied increases from 100 to 105. Calculate the price elasticity of supply coefficient. Show your work.

   5/5 = 1

4. Given your answer to question #3, is the supply for good C perfectly elastic, relatively elastic, unit elastic, relatively inelastic, or perfectly inelastic? Explain how you determined your answer.

   It is perfectly elastic because e = 1.

5. Suppose that good O and good N are complements. If the price of good O increases by 10%, what will happen to the demand curve of good N?

   It will shift to the left because they are compliments so the demand for both will decrease.

6. The price of good R rises by 10% and the quantity demanded of good O decreases by 20%. Calculate the cross-price elasticity of demand between good R and good O. Show your work.

   -20%/10% = -2

7. Given your answer to question #6, are good R and good O complements, substitutes, normal goods, or inferior goods? Explain how you determined your answer.

   They are compliments because exy < 0.

8. Suppose that Avery's income increased by 25% and his purchase of good C increased by 75%. Calculate the income elasticity of good C. Show your work.

   75%/25% = 3

9. Given your answer to question #8, is good C a complement, substitute, normal good, or inferior good? Explain how you determined your answer.

   C is a normal good because exn = 3 > 1

10. Joel's income increased by 25% and his purchase of good K decreased by 25%. Calculate the income elasticity of good K. Show your work.

    -25%/25% =. -1

11. Given your answer to question #10, is good K a complement, substitute, normal good, or inferior good? Explain how you determined your answer.

    K is an inferior good, because ei is -.

12. Read the message created by the names of the goods above. What is the name of the last good?

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Other Elasticities

TEACHER WORKSHEETS URP UltimateReviewPacket.com

Part 1: Check Your Understanding- *Complete the following.*

1. Identify two goods that likely have a cross-price elasticity of demand coefficient that is positive. Explain your reasoning.
   Coffee and Tea, because when people cant get coffee, they drink tea.

2. Identify a good that likely has an income elasticity of demand coefficient that is negative. Explain your reasoning.

   Ramen, when people don't have a lot of money they purchase ramen packets because it is a cheap way to get carbs.

3. Why would a business be interested in knowing the income elasticity of demand coefficient for their products? Use an example to support your answer.

   So they could predict how the demand for their products would be effected by change in consumer incomes as a result of changes in the ecnomy.

Part 2: Article Analysis- *Read the article excerpt and complete the following.*

"The U.S. average retail price per gallon of regular motor gasoline has fallen 28% from its 2014 peak of $3.70 per gallon...to $2.68 per gallon. However, this price decline may not have much effect on automobile travel, and in turn, gasoline consumption...EIA's Short-Term Energy Outlook (STEO) uses a price elasticity of -0.02 to estimate and forecast consumption of motor gasoline, while also considering anticipated changes in travel demand and fuel economy...Price elasticities can be difficult to interpret, as demand can change for reasons beyond changes in fuel price, including changes in other economic factors."

4. Is the demand for gasoline perfectly elastic, relatively elastic, unit elastic, relatively inelastic, or perfectly inelastic? Use information from the article to support your answer.
   Cannont open link.

5. According to this article, the price of gasoline would need to fall by what percent to increase gas consumption by 1%? Show your work.

6. Why is it difficult to calculate the precise elasticity of demand for gasoline? Explain using an example.

7. Suppose that a 20% decrease in the price of electric cars resulted in a 10% decrease in the quantity demanded of gasoline. Calculate the cross-price elasticity of demand coefficient for electric cars and gas and identify if they are substitutes or complements.

8. Suppose, instead, that a 10% decrease in the price of gas resulted in a 12% increase in the quantity demanded of gasoline powered cars. Calculate the cross-price elasticity of demand coefficient for gas and cars and identify if they are substitutes or complements.

9. Suppose incomes increased by 10% and that gasoline consumption increased by 20%. Calculate the income elasticity of demand coefficient for gasoline and identify if it is a normal good or an inferior good.

10. Assume that the cross-price elasticity of demand coefficient between cars and planes is 0. Does this make them substitutes, complements, or something else? Explain.

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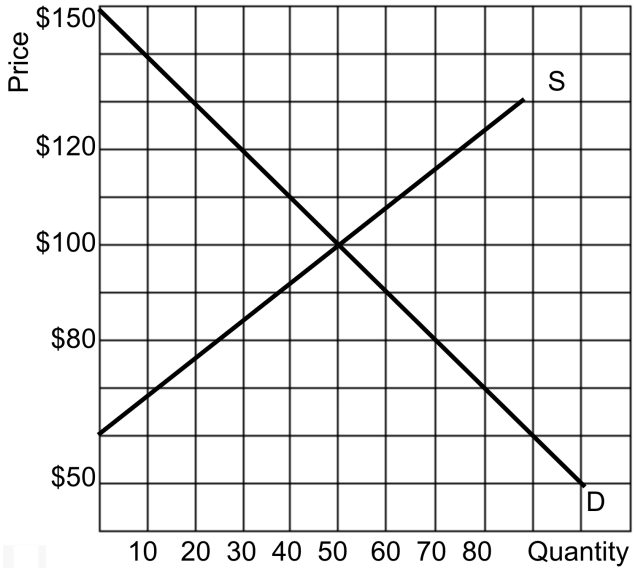
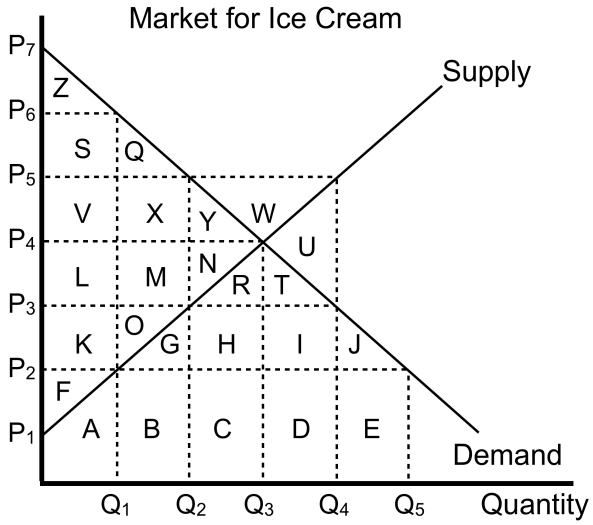
Market Equilibrium, CS, and PS

Part 1: Check Your Understanding- *The demand shows how much consumers are willing to pay for shuttles that transport them from the airport to a resort and the supply shows the number of shuttles that are willing to drive passengers. Use the graph to complete the following.*



1. The data shows that at least one individual is willing to pay $120 for a private shuttle. How much is their individual consumer surplus?
   Individual consumer surplus = $20.
2. How much total consumer surplus do all the buyers receive when the market is at equilibrium? Show your work.
   1250
3. If one shuttle provider is willing to drive to the resort for $60, how much producer surplus does this individual shuttle driver receive when the market is at equilibrium?
   $40
4. At equilibrium, how much total producer surplus do all the sellers receive? Show your work.
   1250
5. Assume that the resort begins to offer a shuttle service for only $80. Will the total consumer surplus increase, decrease, or stay the same?
   Decrease, triangle gets smaller.
6. Assume instead that self-driving cars increase the supply resulting in an equilibrium price of $50. Calculate the total consumer surplus at the new equilibrium. Show your work.
   I am confused on this.

Part 2: Practice- *The graph shows the market for ice cream. The letters on the graph represent enclosed areas.*



7. Identify the equilibrium price and quantity.
   p4 and q3
8. Identify the area of consumer surplus at equilibrium.
   v + x + y + s + q + z
9. Identify the area of producer surplus at equilibrium.
   L + M + N + o + K + F
10. Assume instead that the demand for ice cream increased resulting in an equilibrium price of P_5. Identify the change in the producer surplus.
    Add W + Y + x+ v
11. Assume instead that the supply for ice cream decreased, resulting in an equilibrium price of P_5. Identify the change in the consumer surplus.
    Decreased by v + x + y

Part 3: Putting It All Together- *Use the quote from the essay Where Do Prices Come From? to complete the following.*

"People don't pay what they're willing to pay unless they have to. When they have choices, they don't have to. Competition protects the buyer. And it protects the seller."

12. Explain how competition "protects" both buyers and the sellers.

    cannot open links