

ECON 1021A-002

EXAMPLE MIDTERM 1, FALL 2017 (E. RIVERS)

This was Midterm 1 from Fall 2016. The coverage by chapter was as follows:

Questions 1-4 (Ch. 1)

Questions 5-18 (Ch. 2)

Questions 19-32 (Ch. 3)

Questions 33-42 (Ch. 4)

Questions 43-50 (Ch. 5)

**There is an answer key included at the end of the document.

Your midterm will also cover chapters 1-5. **However**, the specific topics and number of questions per chapter on your actual midterm may be different than these examples. This example midterm is only meant to give you an idea of the types of questions that might appear on your exam. You should **NOT** limit your studies to these topics. Your midterm can cover any topics from Ch. 1-5. If you need clarification as to what has been covered, please refer to the Reading List document under Resources.

**DEPARTMENT OF ECONOMICS
WESTERN UNIVERSITY**

E. Rivers

ECONOMICS 1021A-002

October 15, 2016

MIDTERM 1

INSTRUCTIONS:

1. You will have **2 hours** to complete the exam.
2. Check that your examination contains 50 questions.
3. Use a **BLACK PENCIL** to complete your Scantron Form.
 - i. Print your **NAME** and complete your **SIGNATURE**
 - ii. Enter your **STUDENT NUMBER**
 - iii. Enter your **SECTION NUMBER** – 002
 - iv. Ensure that the **VERSION CODE** on your question packet matches the version code on your Scantron Form.

In order to get credit for a question, you must record the correct answer on your Scantron Form. No credit will be given for answers recorded in your question packet.

4. You may have pencils, erasers, your student card, and a non-graphing, non-programmable calculator **out of its case** at your desk. All other items including **watches and cell phones must be left in your bag** at the front of the examination room.
5. Please ensure that all electronic devices (cell phones, laptops, etc.) are turned off before storing them in your bag at the front of the examination room.
6. There are no washroom breaks allowed during the test.
7. Do not ask questions during the test. If you have a concern about a question, note it on a piece of paper along with your name and student number and give it to a proctor when you hand in your exam.
8. When you have finished, please hand in your Scantron Form only.
9. Failure to follow the above instructions will result in an exam mark of zero.

MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

- 1) If you take an additional class this term, you can graduate earlier. This is an example of
 - A) opportunity cost.
 - B) marginal benefit.
 - C) social cost.
 - D) the pursuit of social interest.
 - E) total cost.

- 2) Which of the following creates an incentive to increase the amount of an activity?
 - A) a decrease in the marginal cost of the activity and an equal decrease in the marginal benefit from the activity
 - B) an increase in the marginal cost of the activity and a decrease in the marginal benefit from the activity
 - C) constant marginal cost and constant marginal benefit from the activity
 - D) an increase in the marginal cost of the activity and an equal increase in the marginal benefit from the activity
 - E) a decrease in the marginal cost of the activity and an increase in the marginal benefit from the activity

- 3) Chanel has the option of purchasing one of three products: Brand A, Brand B, or Brand C. The price of each product is \$10. If Chanel decides to purchase a unit of Brand A, the opportunity cost of this decision is
 - A) zero if a unit of Brand A has no marginal benefit.
 - B) the average value to Chanel of a unit of Brand B and a unit of Brand C.
 - C) the total value to Chanel of a unit of Brand B plus a unit of Brand C.
 - D) the higher of the value to Chanel of a unit of Brand B and the value to Chanel of a unit of Brand C.
 - E) the value to Chanel of a unit of Brand A.

Use the information below to answer the following question.

Fact 1 Cost of Sochi Winter Olympics

The Russian government spent \$6.7 billion on Olympic facilities and \$16.7 billion upgrading Sochi area infrastructure. Sponsors spent \$27.6 billion on hotels and facilities hoping to turn Sochi into a year-round tourist magnet.

Source: *The Washington Post*, February 11, 2014

- 4) Refer to Fact 1. The opportunity cost of the Sochi Olympics was
- A) \$6.7 billion because that was the cost of the Olympic facilities.
 - B) \$23.4 billion because spending on hotels and facilities of \$27.6 billion was unnecessary.
 - C) \$27.6 billion because this spending was unnecessary for the actual Olympic events to take place.
 - D) \$51 billion if the Russian government and sponsors would not have spent this money had the Olympics not been held in Sochi.
 - E) zero because the Russian government competed with other countries to host the Olympics.
- 5) The concept of opportunity cost
- A) explains that goods are swapped for other goods.
 - B) cannot be explained by using a production possibilities frontier.
 - C) implies that when a person is more efficient in the production of one good, he should produce that good and exchange it for some good that he is relatively less efficient at producing.
 - D) implies that because productive resources are scarce, we must give up some of one good to acquire more of another.
 - E) implies that a double coincidence of wants must be present for exchange to take place.
- 6) On a graph of a production possibilities frontier, opportunity cost is represented by
- A) the slope of the production possibilities frontier.
 - B) the x -axis intercept.
 - C) a point on the horizontal axis.
 - D) a ray through the origin.
 - E) a point on the vertical axis.

Use the figure below to answer the following question.

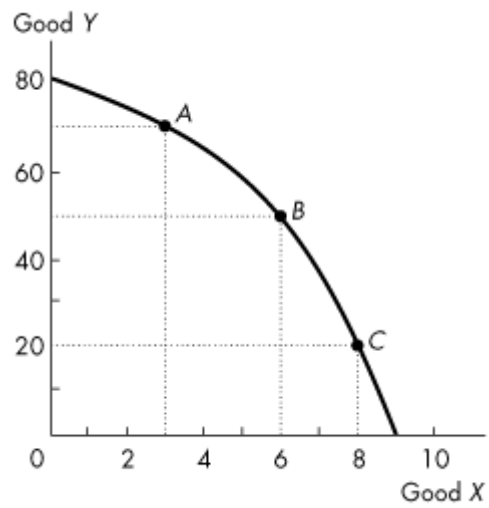


Figure 1

- 7) Refer to the production possibilities frontier in Figure 1. At point C, the opportunity cost of producing one more unit of X is
- A) 1 unit of X.
 - B) 20 units of X.
 - C) 1 unit of Y.
 - D) 20 units of Y.
 - E) 8 units of X.

Use the figure below to answer the following question.

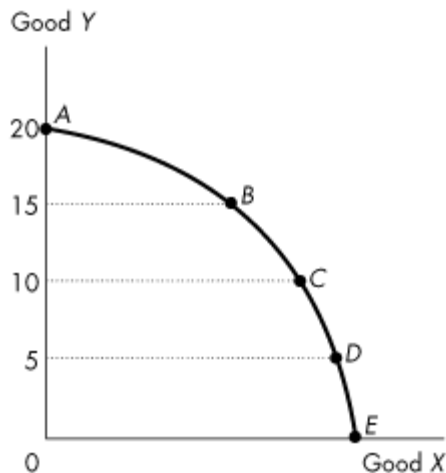


Figure 2

- 8) Refer to the production possibilities frontier in Figure 2. The fact that less of X must be given up when moving from D to C than when moving from B to A indicates
- A) unemployed resources at D .
 - B) increasing opportunity cost.
 - C) the consequences of technological improvement.
 - D) comparative advantage in the production of X .
 - E) decreasing opportunity cost.

Use the table below to answer the following questions.

Table 1

The following table gives points on the production possibilities frontier for goods *X* and *Y*.

Point	Production of <i>X</i>	Production of <i>Y</i>
<i>A</i>	0	40
<i>B</i>	4	36
<i>C</i>	8	28
<i>D</i>	12	16
<i>E</i>	16	0

- 9) The economy illustrated by the data in Table 1 exhibits
- A) constant opportunity cost in the production of *X*.
 - B) decreasing opportunity cost.
 - C) initially increasing, then decreasing opportunity cost.
 - D) increasing opportunity cost.
 - E) constant opportunity cost in the production of *Y*.
- 10) The diagram of the production possibilities frontier corresponding to the data in Table 1 would be
- A) negatively sloped and bowed outward.
 - B) positively sloped for *X* and negatively sloped for *Y*.
 - C) a horizontal line.
 - D) negatively sloped and linear.
 - E) negatively sloped and bowed inward.

Use the figure below to answer the following question.

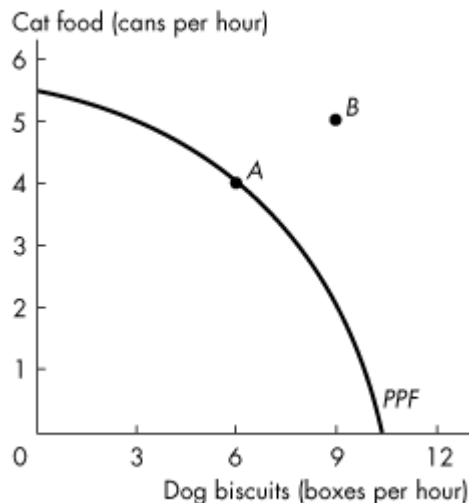


Figure 3

- 11) Figure 3 shows the production possibilities frontier for a firm that produces pet food. This PPF _____ illustrate scarcity because _____.
- does not; the PPF is downward sloping
 - does not; the firm can produce any quantity it wants if it is willing to pay a high enough price
 - does; as more is produced, consumer must pay a higher price
 - does not; scarcity does not occur in the market for pet food
 - does; the firm cannot produce points outside the frontier, and as the firm moves along the PPF, it cannot produce more dog biscuits without producing less cat food
- 12) Choose the correct statements.
- Opportunity cost of a good is the increase in the quantity produced of one good divided by the decrease in the quantity produced of another good as we move along the *PPF*.
 - The opportunity cost of an action is the highest-valued alternative forgone.
 - Opportunity cost is a ratio.
 - There is no relationship between the opportunity cost of producing an additional good measured on the *x*-axis and the opportunity cost of producing an additional good measured on the *y*-axis.
- Statements 2 and 4 are correct.
 - Statements 1 and 2 are correct.
 - Statements 3 and 4 are correct.
 - Statements 2 and 3 are correct.
 - Statements 1 and 3 are correct.

Use the figure below to answer the following question.

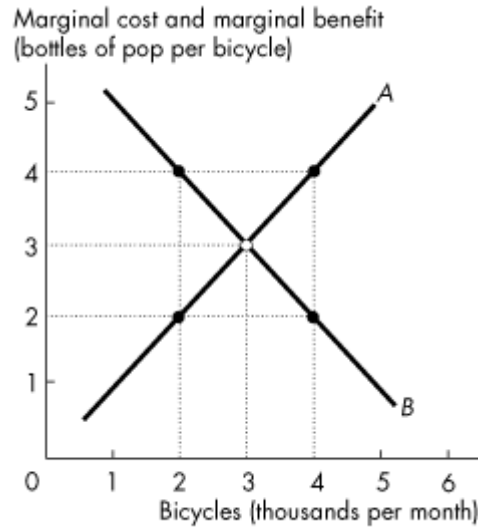


Figure 4

- 13) In Figure 4, the curve labelled *A* is the _____ curve and the curve labelled *B* is the _____ curve.
- marginal benefit; trade
 - marginal cost; marginal benefit
 - marginal cost; trade
 - production possibilities; trade
 - marginal benefit; marginal cost
- 14) A technological improvement is represented by
- a movement along the production possibilities frontier.
 - a point outside the production possibilities frontier.
 - a point inside the production possibilities frontier.
 - a movement from a point inside the production possibilities frontier to a point on the production possibilities frontier.
 - an outward shift of the production possibilities frontier.
- 15) In general, if country *A* is accumulating capital at a faster rate than country *B*, then country *A*
- will have more unemployment than country *B*.
 - will experience faster growth in prices compared to country *B*.
 - is using a larger proportion of resources to produce consumption goods.
 - will soon have a comparative advantage in the production of most goods.
 - will have a production possibilities frontier that is shifting out faster than country *B*'s.

Use the information below to answer the following questions.

Fact 2

In an eight-hour day, Thelma can produce either 24 loaves of bread or 8 kilograms of butter. In an eight-hour day, Otis can produce either 12 loaves of bread or 6 kilograms of butter.

- 16) Given Fact 2, the opportunity cost of producing 1 loaf of bread is
- A) 8 kilograms of butter for both Thelma and 6 kilograms of butter for Otis.
 - B) $\frac{1}{3}$ a kilogram of butter for Thelma and $\frac{1}{2}$ a kilogram of butter for Otis.
 - C) 3 kilograms of butter for Thelma and 2 kilogram of butter for Otis.
 - D) 20 minutes ($\frac{1}{3}$ hour) for Thelma and 30 minutes ($\frac{1}{2}$ hour) for Otis.
 - E) not calculable from the given information.
- 17) Refer to Fact 2. Which one of the following statements is true?
- A) Thelma has a comparative advantage in butter production.
 - B) Thelma has a comparative advantage in bread production.
 - C) Otis has an absolute advantage in bread production.
 - D) Otis has a comparative advantage in bread production.
 - E) Otis has an absolute advantage in butter production.
- 18) Which of the following describes comparative advantage?
- A) Firm A can produce a good at a cost of \$3 a unit, and Firm B can produce the same good at a cost of \$4 a unit.
 - B) Firm A can produce 4 boxes of cereal in a day, and Firm B can produce 5 boxes of cereal in a day.
 - C) Jane can type 50 words per minute, and Joe can type 60 words per minute.
 - D) To produce a basket of wheat, Farmer John must give up growing 2 baskets of corn, whereas Farmer Ben must give up 3 baskets of corn to produce a basket of wheat.
 - E) Bill can read one book in a week, but it takes Jeannie 10 days to read the same book.
- 19) The opportunity cost of a hot dog in terms of hamburgers is
- A) the ratio of the money price of a hot dog to the money price of a hamburger.
 - B) the money price of a hot dog minus the money price of a hamburger.
 - C) the ratio of the slope of the demand curve for hot dogs to the slope of the demand curve for hamburgers.
 - D) smaller in the winter than in the summer.
 - E) the ratio of the slope of the supply curve of hot dogs to the slope of the supply curve of hamburgers.

- 20) Good *A* is a normal good if
- A) a rise in the price of a complement causes the demand for *A* to decrease.
 - B) good *A* satisfies the law of demand.
 - C) income and the demand for *A* are negatively related.
 - D) the demand for *A* decreases when income falls.
 - E) a rise in the price of a substitute causes the demand for *A* to increase.
- 21) Networks increase the price they charge cable television firms for programming. As a result, the price of cable television rises. Choose the correct statement.
- A) The price increased because the demand curve for cable television shifted rightward.
 - B) The price will return to its original level because the price increase will cause demand to fall.
 - C) The price increased because the supply curve for cable television shifted rightward.
 - D) The price increased because the demand curve for cable television shifted leftward.
 - E) The price increased because the supply curve for cable television shifted leftward.
- 22) The price of a good will tend to fall if
- A) there is a surplus at the current price.
 - B) the current price is below the equilibrium price.
 - C) the quantity supplied exceeds the quantity demanded at the current price.
 - D) either A or C are true.
 - E) None of the above are true.
- 23) Suppose we observe a fall in the price of good *A* and a decrease in the quantity of good *A* bought and sold. Which one of the following is a likely explanation?
- A) The demand for *A* increased.
 - B) The supply of *A* decreased.
 - C) The law of demand is violated.
 - D) The supply of *A* increased.
 - E) The demand for *A* decreased.
- 24) If *A* and *B* are substitutes and the price of *A* rises, we will observe
- A) a decrease in the demand for *A*.
 - B) an increase in the equilibrium price but a decrease in the equilibrium quantity of *B*.
 - C) a decrease in the equilibrium price and the equilibrium quantity of *B*.
 - D) an increase in the equilibrium price and the equilibrium quantity of *B*.
 - E) a decrease in equilibrium price but an increase in the equilibrium quantity of *B*.

- 25) Crude oil is a very important factor of production used in the production of gasoline. If the price of crude oil rises, we would expect the
- A) equilibrium quantity of gasoline to rise due to an increase in demand.
 - B) price of gasoline to fall due to an increase in demand.
 - C) equilibrium quantity of gasoline to fall due to an increase in supply.
 - D) price of gasoline to rise due to a decrease in supply.
 - E) price of gasoline to rise due to an increase in demand.
- 26) If demand increases and supply decreases, then the
- A) effect on both equilibrium price and quantity is unknown.
 - B) equilibrium price rises but the effect on the equilibrium quantity is unknown.
 - C) equilibrium quantity decreases but the effect on the equilibrium price is unknown.
 - D) equilibrium price falls but the effect on the equilibrium quantity is unknown.
 - E) equilibrium quantity increases but the effect on the equilibrium price is unknown.
- 27) If we observe an increase in the equilibrium quantity of good *A*, we know that
- A) either the demand for *A* has increased or the supply of *A* has increased or both.
 - B) either the demand for *A* has decreased or the supply of *A* has increased or both.
 - C) either the demand for *A* has decreased or the supply of *A* has decreased or both.
 - D) either the demand for *A* has increased or the supply of *A* has decreased or both.
 - E) the price of *A* has risen.
- 28) The market for coffee is initially in equilibrium. If coffee is a normal good, then a decrease in income will
- A) decrease the price and the quantity supplied of coffee.
 - B) decrease the price and the quantity demanded of coffee.
 - C) have no effect on the market for coffee.
 - D) increase the price and the quantity demanded of coffee.
 - E) increase the price and the quantity supplied of coffee.
- 29) The market for coffee is initially in equilibrium. If there is an increase in the wages of farm workers who harvest coffee beans, the equilibrium quantity of coffee
- A) increases.
 - B) decreases.
 - C) remains the same.
 - D) increases or decreases depending on the slope of the supply and demand curves.
 - E) increases or decreases depending on the relative shifts of the supply and demand curves.

Use the table below to answer the following question.

Table 2
The Market for Car-Seat Heaters

Price (dollars per heater)	Quantity Demanded (heaters per month)	Quantity Supplied (heaters per month)
40	500	300
50	450	350
60	400	400
70	350	450
80	300	500
90	250	550
100	200	600

- 30) Refer to Table 2. Suppose a problem develops with car-seat heaters - they malfunction and occasionally cause serious burns. As a result, demand decreases by 100 heaters at each price. The new equilibrium price is \$_____ and the new equilibrium quantity is _____ heaters per month.
- A) 60; 400 B) 50; 350 C) 70; 450 D) 70; 350 E) 50; 450

Use the figure below to answer the following question.

Table 3
Demand and Supply Schedules for Cups of Coffee each day at CoolU

Price (dollars per cup)	Quantity Demanded (cups of coffee per day)	Quantity Supplied (cups of coffee per day)
0.70	1,200	0
0.80	1,100	200
0.90	1,000	400
1.00	900	600
1.10	800	800
1.20	700	1,000
1.30	600	1,200
1.40	500	1,400
1.50	400	1,600

- 31) Refer to Table 3. If the price is set at \$0.80 per cup, there is _____ leading to a price _____.
- A) a surplus; fall
 - B) a surplus; rise
 - C) a shortage; fall
 - D) a shortage; rise
 - E) an equilibrium; rise
- 32) The demand curve for widgets is $P = 500 - 5Q_D$ and the supply curve for widgets is $P = 100 + 3Q_S$. What is the equilibrium price of a widget?
- A) \$75
 - B) \$50
 - C) \$250
 - D) \$125
 - E) \$325
- 33) Demand is inelastic if
- A) the quantity demanded is very responsive to a change in price.
 - B) a 10 percent change in price results in a 1 percent change in the quantity supplied.
 - C) the price elasticity of demand is 0.2.
 - D) the price does not change when supply increases.
 - E) a small change in price results in a large change in quantity demanded.
- 34) If the demand curve for a good is a horizontal line, then the good has
- A) a price elasticity of demand that is likely to rise in the short run.
 - B) zero income elasticity.
 - C) a price elasticity of demand that is likely to fall in the short run.
 - D) price elasticity of demand equal to zero.
 - E) infinite price elasticity of demand.

- 35) Which one of the following will yield a measured price elasticity of demand of 2.5? A 10 percent rise in price results in a
- A) 25 percent decrease in quantity demanded.
 - B) 0.25 percent decrease in quantity demanded.
 - C) 4 percent decrease in quantity demanded.
 - D) 2.5 percent decrease in quantity demanded.
 - E) 10 percent decrease in quantity demanded.
- 36) Business people speak about price elasticity of demand without using the actual term. Which one of the following statements reflects elastic demand for a good?
- A) "My customers are real bargain hunters. Since I set my prices just a few cents below my competitors, customers have flocked to the store, and sales are booming."
 - B) "With the recent economic recovery, people have more income to spend and sales are booming, even at the previous prices."
 - C) "A price cut won't help me. It won't increase sales, and I'll just get less money for each unit."
 - D) "I don't think a price cut will make any difference to my bottom line. What I may gain from selling more I would lose on the lower price."
 - E) "A very cold winter has increased my sales of skates and hockey sticks."
- 37) If the Canucks lower ticket prices and find that total revenue increases, then the price elasticity of demand for tickets is
- A) zero.
 - B) equal to 1.
 - C) negative.
 - D) greater than 1.
 - E) greater than zero but less than 1.
- 38) With higher fuel costs, airlines raise their average fare from \$0.50 to \$1.50 per passenger kilometre and the number of passenger kilometres decreases from 2.5 million a day to 1.5 million a day. Over this price range, demand is
- A) perfectly inelastic.
 - B) elastic, but not perfectly elastic.
 - C) unit elastic.
 - D) inelastic, but not perfectly inelastic.
 - E) perfectly elastic.
- 39) If a rise in the price of good *B* increases the demand for good *A*, then
- A) *A* and *B* are complements.
 - B) the demand for *A* is price elastic.
 - C) *A* is a resource used in the production of *B*.
 - D) *A* and *B* are substitutes.
 - E) the cross elasticity of demand between *A* and *B* is negative.

- 40) If good *A* is a complement of good *B*, then the cross elasticity of demand is
A) infinity. B) zero. C) negative. D) 1. E) positive.
- 41) If Mr. Brown's income increases by 12 percent and as a result his quantity demanded of music downloads increases by 4 percent, Mr. Brown's income elasticity of demand for music downloads is
A) -3.0. B) 3.0. C) 0.33. D) 48.0. E) -0.33.
- 42) When a linear supply curve
A) intersects the origin, the good has an elasticity of supply equal to 1.
B) is vertical, the good has an elasticity of supply equal to infinity.
C) is horizontal, the good has an elasticity of supply equal to zero.
D) intersects the origin, the good has an elasticity of supply that is negative.
E) intersects the origin, the good has an elasticity of supply equal to zero.
- 43) Which of the following is true?
A) When a market price allocates resources, some people who are willing and able to pay that price don't get the resource.
B) When resources are allocated by force, people with the "right" characteristics get the resources.
C) When the range of activities to be monitored is large and complex, a command system allocates resources better than a market price.
D) When resources are allocated on the basis of personal characteristics, all people who are willing and able to pay the price get the resource.
E) Force can include violence or a legal framework for enforcing contracts and allocating resources.
- 44) A used truck has a sticker price of \$21,000. Arthur decided he would be willing to pay up to \$22,000 for this truck, but would try to negotiate the lowest price he could with the seller. He bought the truck for \$20,000. Arthur obtained a consumer surplus of
A) \$2,000. B) \$1,000. C) \$21,000. D) \$20,000. E) \$21,000.

Use the figure below to answer the following question.

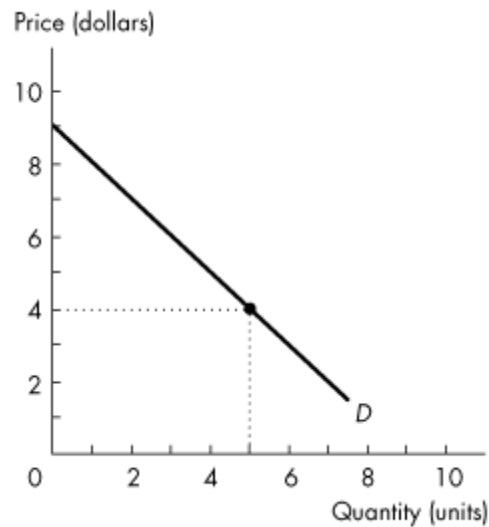


Figure 5

- 45) Consider the demand curve in Figure 5. If the price of the good is \$4, what is the consumer surplus?
- A) \$20.00
 - B) \$12.50
 - C) \$25.00
 - D) \$32.50
 - E) none of the above
- 46) A market demand curve is constructed by
- A) subtracting the quantity demanded by all individuals from the quantity supplied by all producers at each price.
 - B) adding the quantities demanded by all individuals at each price.
 - C) subtracting the quantity supplied by all producers from the quantity demanded by all individuals at each price.
 - D) determining the quantity supplied by all producers at all possible prices.
 - E) adding the prices all consumers are willing to pay for any given quantity.
- 47) In 2012, a severe drought led to an increase in the price of corn. Farmer Lyle's costs and output were not affected by the drought. Comparing 2012 to the previous year in which there was no drought, Farmer Lyle's
- A) supply of corn became perfectly elastic.
 - B) producer surplus increased and his consumer surplus increased.
 - C) consumer surplus decreased and his producer surplus increased.
 - D) consumer surplus increased.
 - E) producer surplus increased.

- 48) The price of pizza increases. Everything else remaining the same, the consumer surplus from pizza
- A) is less than the producer surplus from pizza.
 - B) does not change.
 - C) decreases.
 - D) is greater than the producer surplus from pizza.
 - E) increases.

Use the figure below to answer the following question.

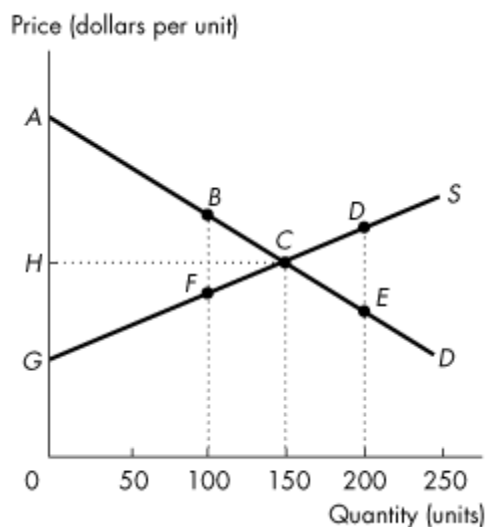


Figure 6

- 49) Refer to Figure 6. If the level of output is 150 units, the consumer surplus is area
- A) *BCF*.
 - B) *ACG*.
 - C) *DCE*.
 - D) *ACH*.
 - E) *HCG*.
- 50) At current output, the marginal social benefit from Furbys is greater than marginal social cost. To achieve an efficient allocation, which of the following must occur? (1) Furby output must increase. (2) Furby output must decrease. (3) the marginal social benefit of Furbys will rise. (4) the marginal social cost of Furbys will fall.
- A) 1 only
 - B) 2 and 4
 - C) 1 and 4
 - D) 2 and 3
 - E) 1 and 3

Answer Key

Testname: EC1021A002MT1OCT16

- | | |
|-------|-------|
| 1) B | 43) E |
| 2) E | 44) A |
| 3) D | 45) B |
| 4) D | 46) B |
| 5) D | 47) E |
| 6) A | 48) C |
| 7) D | 49) D |
| 8) B | 50) A |
| 9) D | |
| 10) A | |
| 11) E | |
| 12) D | |
| 13) B | |
| 14) E | |
| 15) E | |
| 16) B | |
| 17) B | |
| 18) D | |
| 19) A | |
| 20) D | |
| 21) E | |
| 22) D | |
| 23) E | |
| 24) D | |
| 25) D | |
| 26) B | |
| 27) A | |
| 28) A | |
| 29) B | |
| 30) B | |
| 31) D | |
| 32) C | |
| 33) C | |
| 34) E | |
| 35) A | |
| 36) A | |
| 37) D | |
| 38) D | |
| 39) D | |
| 40) C | |
| 41) C | |
| 42) A | |