Version 111

THE UNIVERSITY OF WESTERN ONTARIO
LONDON CANADA

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MIDTERM 1

INSTRUCTIONS:

1. The examination begins at **4:00 p.m.** and ends at **6:00 p.m.**

2. Check that your examination paper contains 16 pages.

3. Use a **BLACK PENCIL** to complete your Scantron Form.

   Print your **NAME** and complete your SIGNATURE.

   Enter your **STUDENT NUMBER**.

   Enter your **SECTION NUMBER**, which is either 002 or 004.

4. **Please hand in Scantron Form only.**

5. You may use a regular calculator but you may not use a programmable or graphing calculator.

6. Your cell phone must be switched off and left in your bag at the front of the exam room.

NOTE: QUESTIONS ARE PRINTED ON BOTH SIDES OF EACH PAGE

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

1) Best Buy is having a hard time. All of the following statements about Best Buy are true *except*:
   A) Best Buy's decisions affect What, How, and for Whom goods and services get produced.
   B) Best Buy makes decisions in its self-interest.
   C) Best Buy makes decisions in the social interest.
   D) Best Buy makes its decisions at the margin.
   E) Best Buy responds to incentives.

2) The opportunity cost of producing good *X* using technology *A* is lower than the opportunity cost of producing good *X* using technology *B*. If technology *A* is used, as more *X* is produced, _____, and if technology *B* is used _____.
   A) we move along the *PPF*; we move inside the *PPF*
   B) we move along the *PPF*; the *PPF* shifts inward
   C) the *PPF* shifts outward; we move inside the *PPF*
   D) the *PPF* shifts outward; the *PPF* shifts inward
   E) we move outside the *PPF*; we move inside the *PPF*

3) In an 8 hour day, Andy can produce either 8 loaves or 24 kg of butter; Rolfe can produce either 24 loaves or 24 kg of butter. Andy and Rolfe
   A) can gain from exchange if Andy specializes in butter production and Rolfe specializes in bread production.
   B) can gain from exchange if Andy specializes in bread production and Rolfe specializes in butter production.
   C) cannot gain from exchange.
   D) can exchange but only Rolfe will gain.
   E) can exchange but only Andy will gain.

4) In 2008, 200,000 gas grills were demanded at a price of $500. In 2009, more than 200,000 gas grills were demanded at the same price. This increase could be the result any of the following ***except***
   A) a rise in the price of natural gas, a complement of a gas grill.
   B) an increase in income if gas grills are a normal good.
   C) a rise in the price of an electric stove, a substitute for a gas grill.
   D) an increase in population.
   E) a fall in the price of natural gas, a complement of a gas grill.

5) When the price is above the equilibrium price, the quantity demanded
A) is less than the equilibrium quantity and the quantity supplied is also less than the equilibrium quantity.
B) is less than the equilibrium quantity but the quantity supplied exceeds the equilibrium quantity.
C) exceeds the equilibrium quantity and the quantity supplied also exceeds the equilibrium quantity.
D) exceeds the equilibrium quantity but the quantity supplied is less than the equilibrium quantity.
E) could be less than or greater than the equilibrium quantity depending on whether demand exceeds supply.

6) Throughout the past 20 years, the price of sport utility vehicles (SUVs) rose and each year more were purchased. This fact suggests that
A) there was a technological advance in the production of SUVs.
B) the "law of demand" does not hold in this market.
C) there must have been an increase in the supply of SUVs.
D) there must have been an increase in the demand for SUVs.
E) the relative price of gasoline increased.

7) A technological change lowers the cost of producing coffee. At the same time, the prices of Pepsi and Coke (substitutes for coffee) rise. The equilibrium quantity of coffee will
A) increase.
B) decrease.
C) remain the same.
D) increase or decrease depending on whether the price of coffee rises or falls.
E) increase or decrease depending on relative shifts of the demand and supply curves.

8) The price elasticity of demand equals magnitude of the_____ in the _____ divided by the _____ in the _____ .
A) change; price; change; quantity demanded
B) change; quantity demanded; change; price
C) percentage change; price; percentage change; quantity demanded
D) percentage change; quantity demanded; percentage change; price
E) percentage change; quantity demanded; percentage change; quantity supplied

9) The marginal benefit of a good
A) is the benefit a consumer receives from consuming an assortment of the good.
B) is the additional cost to a consumer of consuming another unit of the good.
C) increases with increased consumption of the good.
D) equals the maximum willingness to pay for another unit of the good.
E) equals the consumer surplus from the good.

10) The competitive market is efficient when
A) people buy the good at a price that matches their marginal benefit.
B) marginal social benefit from the good equals the marginal social cost of producing the good.
C) producers sell the good at a price that exceeds their marginal cost.
D) total surplus is maximized.
E) B and D are true.

11) Sally has to decide whether to study for her economics test or her accounting test. If she chooses to study for accounting, her opportunity cost of studying accounting is
A) equal to the value of studying economics.
B) the future lost wages that will occur if she fails her accounting exam.
C) less than the value of studying economics.
D) studying economics.
E) not comparable to the value of studying economics.

12) "There can be too much of a good thing." This statement suggests that
A) certain goods and services such as education and health care are inherently desirable and should be produced regardless of costs and benefits.
B) a good may be produced to the point where its marginal benefit exceeds its marginal cost.
C) a good may be produced to the point where its marginal cost exceeds its marginal benefit.
D) choices made in self-interest cannot be applied to many economic decisions.
E) a good may be produced to the point where its marginal benefit is equal to its marginal cost.

Use the information below to answer the following question.

Fact 1: Costs Soar for London Olympics

The regeneration of East London is set to add extra £1.5 billion to taxpayers' bill.
The Times, London, July 6, 2006

13) Refer to Fact 1. The cost of regenerating East London _____ an opportunity cost of hosting the 2012 Olympic Games _____.
A) is not; because regenerating East London is an unnecessary expense
B) is not; because few people attending the 2012 Olympics will spend much time outside Olympic venues
C) is; if the property taxes of people living in East London increase
D) is; if the costs of the East London regeneration is equal to a significant percentage of the total amount spent by London taxpayers to host the 2012 Olympics
E) is; if the regeneration of East London would not occur unless London hosted the 2012 Olympics

14) Model *A* is superior to model *B* if
A) it contains fewer unrealistic assumptions than model *B*.
B) it is scientifically "elegant."
C) it is preferred by a majority of researchers in a public opinion poll.
D) its predictions correspond more closely to the facts than the predictions of model *B*.
E) it contains more real world detail than model *B*.

15) Which of the following statements are positive?
1. The federal government should increase production of biofuels
2. Air travel has increased since September 11
3. The greatest number of accidents are caused by drunk drivers
4. We ought to have a cure for cancer
A) statements 2 and 3 are positive
B) statements 1 and 2 are positive
C) statements 1 and 4 are positive
D) statements 3 and 4 are positive
E) statements 2 and 4 are positive

16) If opportunity costs are increasing, then the production possibilities frontier
A) will be bowed out and have a negative slope.
B) will be bowed out and have a positive slope.
C) will be positively sloped.
D) will be linear and have a negative slope.
E) reflects the fact that available resources are equally useful in all production activities.

Use the figure below to answer the following question.

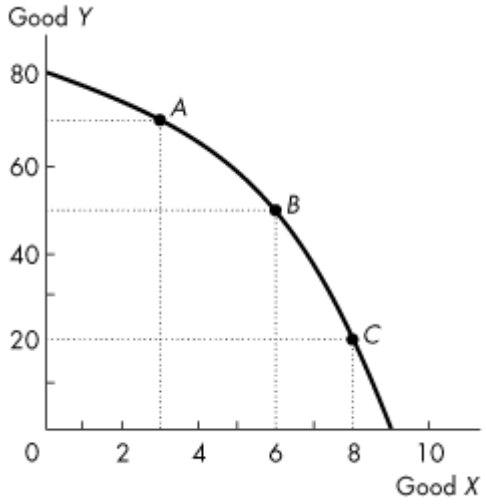

Figure 1

17) Refer to the production possibilities frontier in Figure 1. At point *A*, the opportunity cost of increasing production of *Y* to 80 units is
A) 1 unit of *X*.
B) 80 units of *Y*.
C) 2 units of *X*.
D) 3 units of *X*.
E) 10 units of *Y*.

Use the table below to answer the following question.

Table 1

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

Point	Production of *X*	Production of *Y*
A	0	40
B	4	36
C	8	28
D	12	16
E	16	0

18) Refer to Table 1. What does point *C* mean?
A) There is unemployment at this point.
B) If 28 units of *Y* are produced, then more than 8 units of *X* can be produced.
C) If 8 units of *X* are produced, then only 36 units of *Y* can be produced.
D) If 8 units of *X* are produced, then at most 28 units of *Y* can be produced.
E) If 8 units of *X* are produced, then at least 28 units of *Y* can be produced.

19) With allocative efficiency, for each good produced,
A) marginal benefit exceeds marginal cost by as much as possible.
B) marginal cost is at its minimum.
C) marginal benefit is at its maximum.
D) marginal benefit equals marginal cost.
E) marginal cost exceeds marginal benefit by as much as possible.

20) In general, if country *A* is accumulating capital at a faster rate than country *B*, then country *A*
A) will have a higher rate of inflation than country *B*.
B) will have more unemployment than country *B*.
C) will soon have a comparative advantage in the production of most goods.
D) is using a larger proportion of resources to produce consumption goods.
E) will have a production possibilities frontier that is shifting out faster than country *B*'s.

21) The principal reason that production possibilities have grown more rapidly in Hong Kong than in Canada over the last 40 years is because
A) of cheap Hong Kong labour.
B) Hong Kong has more natural resources.
C) Hong Kong has fewer workers.
D) Hong Kong has devoted a larger proportion of its resources to capital accumulation.
E) of foreign aid to Hong Kong.

22) Individuals *A* and *B* can both produce goods *X* and *Y*. Individual *A* has a comparative advantage in the production of *X* if
A) the amount by which *A* must reduce production of *Y* is less than the amount by which *B* must reduce production of *Y* to produce an additional unit of *X*.
B) *B* has superior knowledge about how to produce *X*.
C) the amount by which *A* must reduce production of *Y* is more than the amount by which *B* must reduce production of *Y* to produce an additional unit of *X*.
D) *A* has a preference to consume *X*.
E) *A* is faster than *B* at producing *X*.

23) Any two individuals will gain from exchange
A) unless they have the same opportunity costs for producing all goods.
B) unless they have different opportunity costs for producing all goods.
C) if each specializes in the production of the good for which he has the higher opportunity cost.
D) unless one has an absolute advantage in producing all goods.
E) unless they have the same absolute advantage in producing all goods.

24) Suppose John and Joe each have different production possibility frontiers; John specializes in cloth and Joe specializes in corn. John's island unexpectedly has exceptionally good weather, and suddenly he is twice as productive in the production of *both* corn and cloth. Select the best statement.
A) As a result, John will have an absolute advantage in both corn and cloth.
B) There will be a change in what John and Joe specialize in, because John's opportunity cost of production will have risen.
C) This is an example of unemployed resources becoming employed.
D) As a result, it is possible that John and Joe will switch what they specialize in.
E) There will be no change in what John and Joe specialize in, because John's comparative advantage has not changed.

25) In one hour, Sue can produce 50 caps or 10 jackets and Tessa can produce 70 caps or 7 jackets. Sue's opportunity cost of producing a cap is _____ jackets and Tessa's opportunity cost of producing a cap is _____ jackets.
_____ has a comparative advantage in producing caps.
If Sue and Tessa each specialize in producing the good in which they have a comparative advantage and trade 1 jacket for 7 caps, _____.
A) 5.0; 10.0; Tessa; Sue loses but Tessa gains
B) 5.0; 10.0; Sue; both Sue and Tessa gain
C) 0.2; 0.10; Sue; both Sue and Tessa gain
D) 0.2; 0.10; Tessa; both Sue and Tessa gain
E) 0.2; 0.10; Sue; Tessa gains but Sue loses

Use the table below to answer the following question.

Table 2

Year	Coffee Price	Tea Price	Cola Price
2007	$1.25	$1.10	$0.80
2008	$1.50	$1.00	$1.00
2009	$1.25	$1.20	$1.00

26) Refer to Table 2. Between 2008 and 2009, the price of coffee relative to the price of tea _____ while the price of coffee relative to the price of cola _____.
A) rose; rose
B) fell; fell
C) fell; rose
D) rose; fell
E) fell; stayed constant

27) An increase in the price of ground beef
A) increases the demand for chicken, a substitute for ground beef.
B) increases the demand for hamburger buns, a complement of ground beef.
C) increases the quantity demanded of ground beef.
D) decreases the quantity demanded of ground beef.
E) both A and D.

28) Consider the market for cell phones. Suppose the price of a cell phone falls. Explain the effect of this event on the quantity of cell phones demanded and on the demand for cell phones.
A) The quantity of cell phones demanded is unchanged and the demand for cell phones decreases.
B) The quantity of cell phones demanded increases and the demand for cell phones also increases.
C) The quantity of cell phones demanded increases and the demand for cell phones is unchanged.
D) The quantity of cell phones demanded is unchanged and the demand for cell phones increases.
E) The quantity of cell phones demanded decreases and the demand for cell phones is unchanged.

29) Which one of the following would *not* shift the supply curve of good *X* to the right?
A) a rise in the price of *X*
B) a fall in the price of the factors of production used in producing *X*
C) an increase in the price of *Y*, a complement in production of *X*
D) a fall in the price of *Y*, a substitute in production of *X*
E) an improvement in technology used in the production of *X*

30) The fact that a fall in the price of a good results in a decrease in the quantity of the good supplied illustrates
A) technological improvement.
B) the law of demand.
C) the nature of an inferior good.
D) the law of supply.
E) a change in supply.

31) Which one of the following correctly describes how price adjustment eliminates a surplus?
A) As the price falls, the quantity demanded increases and the quantity supplied decreases.
B) As the price falls, the demand for substitutes decreases, which eliminates the surplus.
C) As the price rises, the quantity demanded increases and the quantity supplied decreases.
D) As the price rises, the quantity demanded decreases and the quantity supplied increases.
E) As the price falls, the quantity demanded decreases and the quantity supplied increases.

Use the figure below to answer the following question.

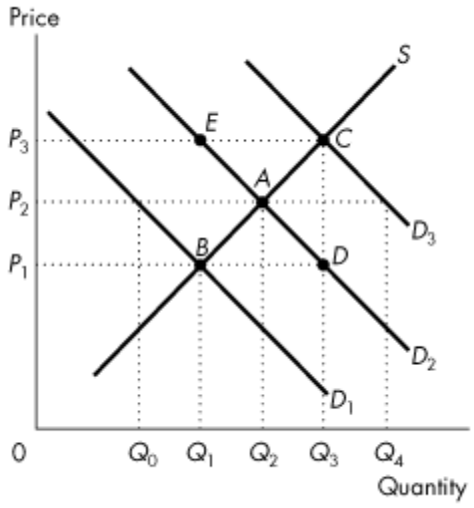

Figure 2

32) Initially, the demand curve for good *A* is D_2 in Figure 2. Suppose good *B* is a substitute for good *A*. If the price of *B* falls
A) the price of *A* will rise.
B) the equilibrium quantity of good *A* will increase.
C) there will be a surplus of good *A* at P_2.
D) the demand curve for good *A* will shift from D_2 to D_3.
E) all of the above are true *except* B.

33) If *A* and *B* are complements in production and the price of *A* falls, the supply of *B*
A) increases and the price of *B* falls.
B) does not change.
C) decreases and the price of *B* rises.
D) decreases and the price of *B* falls.
E) increases and the price of *B* rises.

34) If we observe a decrease in the equilibrium quantity of good *A*, we know that
A) either the demand for *A* has decreased or the supply of *A* has decreased or both.
B) either the demand for *A* has increased or the supply of *A* has decreased or both.
C) either the demand for *A* has increased or the supply of *A* has increased or both.
D) either the demand for *A* has decreased or the supply of *A* has increased or both.
E) none of the above.

Use the table below to answer the following question.

Table 3
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

35) Refer to Table 3. 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. Simultaneously, the cost of production rises, and supply decreases by 100 heaters at each price. The new equilibrium price is $_____ and the new equilibrium quantity is _____ heaters per month.
A) 70; 350
B) 50; 350
C) 70; 450
D) 60; 300
E) 50; 450

36) A fall in the price of a good from $11.50 to $8.50 results in an increase in the quantity demanded from 19,200 to 20,800 units. The price elasticity of demand is
A) 0.27.
B) 30.
C) 0.08.
D) 8.0.
E) 3.75.

Use the figure below to answer the following question.

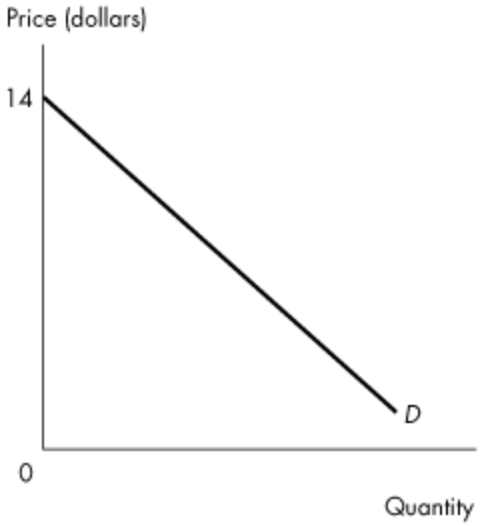

Figure 3

37) Figure 3 illustrates a linear demand curve. If the price falls from $13 to $11,
A) total revenue decreases.
B) total revenue remains unchanged.
C) total revenue initially increases then decreases.
D) total revenue increases.
E) total revenue initially decreases then increases.

Use the table below to answer the following question.

Table 4

Year	Quantity Demanded (units)	Price (dollars)	Income (dollars)
2007	25,000	1	4,000
2008	15,000	3	4,000
2009	5,000	3	6,000

38) Consider the information in Table 4. Select the best statement.
A) The income elasticity of demand is -3.33.
B) The income elasticity of demand is 2.5.
C) The income elasticity of demand is 3.33.
D) The income elasticity of demand is -2.5.
E) We cannot calculate the income elasticity of demand because both income and price are changing at the same time.

39) If the cross elasticity of demand between goods *A* and *B* is positive, then
A) the demands for *A* and *B* are both price inelastic.
B) the demands for *A* and *B* are both price elastic.
C) *A* and *B* are complements.
D) *A* and *B* are substitutes.
E) *A* and *B* are independent goods.

Use the figure below to answer the following question.

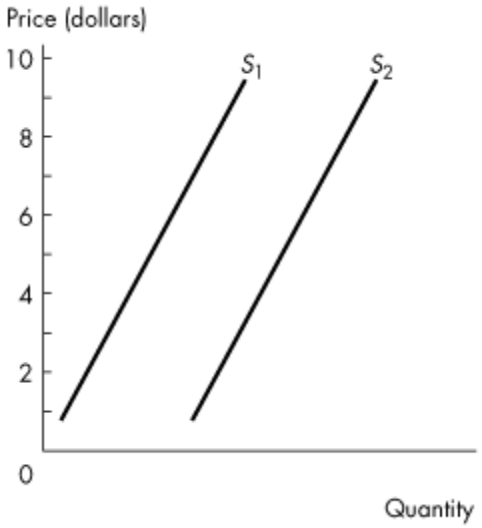

Figure 4

40) The two supply curves in Figure 4 are parallel. Between $7 and $8,
A) S_1 and S_2 have the same elasticity.
B) S_1 is flatter than S_2.
C) S_1 is more inelastic than S_2.
D) S_1 is more elastic than S_2.
E) S_1 is steeper than S_2.

41) At West, recognized as the "jewel in Vancouver's culinary crown", reservations are essential. At Le Bistro Chez Michel, a restaurant in North Vancouver, reservations are recommended. At Vij's, a restaurant not too far from the University of British Columbia, reservations are not accepted.

West allocates scarce table resources by _____, Le Bistro Chez Michel allocates scarce table resources by _____, and Vij's allocates scarce table resources by _____.
A) first-come, first-served; first-come, first-served; first-come, first-served
B) personal characteristics; personal characteristics; first-come, first-served
C) market price; market price and force; force
D) a command system; a combination of a command system and first-come, first-served; first-come, first-served
E) personal characteristics; personal characteristics and first-come, first-served; first-come, first-served

42) The market for strawberries is perfectly competitive. Joe and Haley are consuming the same amount of strawberries, but Joe's demand is much more elastic than Haley's. Which statement is true?

A) Haley's consumer surplus exceeds Joe's.
B) In comparing consumer surpluses, no statement can be made.
C) Any comparison of consumer surplus depends on the price of strawberries.
D) Haley's consumer surplus equals Joe's.
E) Joe's consumer surplus exceeds Haley's.

43) The marginal cost for Morgan's Marvellous Movies is given in the following table:

Table 5

Quantity (number of movies)	Marginal Cost (dollars)
1	4.00
2	4.50
3	5.00
4	5.50
5	6.00

If the firm sells the fifth movie at a price of $7, what is the producer surplus on that movie?

A) $28
B) $1
C) $6
D) $3
E) $7

Use the figure below to answer the following question.

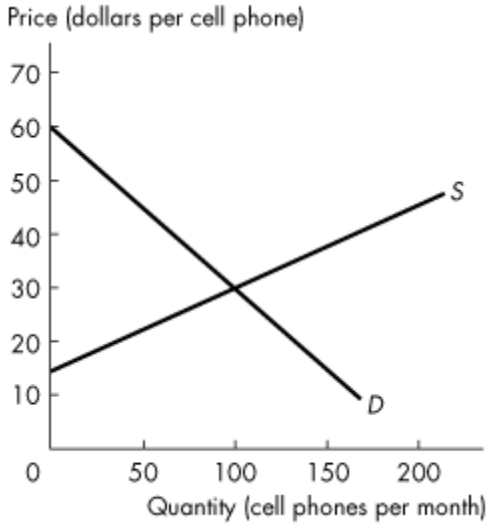

Figure 5

44) Refer to Figure 5. The graph shows the market for cell phones. When production is efficient, total surplus is _____ and the cost of producing the cell phones sold is _____.
A) $2,250; $2,250
B) $2,250; $3,000
C) $750; $1,500
D) $1,500; $2,250
E) $1,500; $750

45) According to the "big tradeoff,"
A) efficiency requires income transfers.
B) a more equally shared pie results in a larger pie.
C) property rights and voluntary exchange insure equality of opportunity.
D) income transfers should make the poorest person as well off as possible.
E) income transfers reduce efficiency.

46) In 1 hour, Andy can produce either 10 loaves or 20 kg of butter; Rolfe can produce either 20 loaves or 10 kg of butter. Many other producers of bread and butter compete with Andy and Rolf in the marketplace and the relative price of bread is 0.25 kg of butter per loaf. The elasticity of demand for bread is 0.5 and the elasticity of demand for butter is 2.
A) Andy specializes in butter production and Rolfe specializes in bread production.
B) Rolf specializes in butter production and Andy specializes in bread production.
C) They both specialize in butter production.
D) They both specialize in bread production.
E) They both produce both bread and butter in proportion to the elasticities of demand.

47) A frost in Brazil hits coffee producers. At the same time, the price of cola, a substitute for coffee, falls. The equilibrium quantity of coffee will _____ and the equilibrium price of coffee will _____

A) decrease; remain the same
B) remain the same; rise
C) decrease; rise, fall, or remain the same depending on relative shifts of the demand and supply curves
D) increase or decrease depending on relative shifts of the demand and supply curves; rise or fall depending on relative shifts of the demand and supply curves
E) remain the same; fall

48) Goods *X* and *Y* are substitutes for consumers and substitutes in production. The price of a resource used to produce good *X* falls. The equilibrium quantity of good *Y* will _____ and the equilibrium price of good *Y* will _____ .

A) decrease; remain the same
B) remain the same; rise
C) decrease; rise or fall depending on relative shifts of the demand and supply curves
D) increase, decrease, or remain the same depending on relative shifts of the demand and supply curves; fall
E) remain the same; fall

49) The cross elasticity of demand for good *X* with respect to the price of good *Y* is negative. *X* is a normal good and *Y* is an inferior good. The supply of good *X* is perfectly elastic. A rise in income _____ the equilibrium price of good *X*.

A) will raise
B) will lower
C) will have no effect on
D) might raise or lower
E) initially raise but then lower

50) If the price elasticity of demand for air travel is 2 and the price elasticity of demand for bus travel is 0.5, then the consumer surplus from air travel _____ .

A) is four times greater than that from bus travel
B) is 25 percent of that from bus travel
C) decreases as the quantity of air travel increases
D) increases as the quantity of air travel increases
E) is less than that from bus travel but by an unknown amount