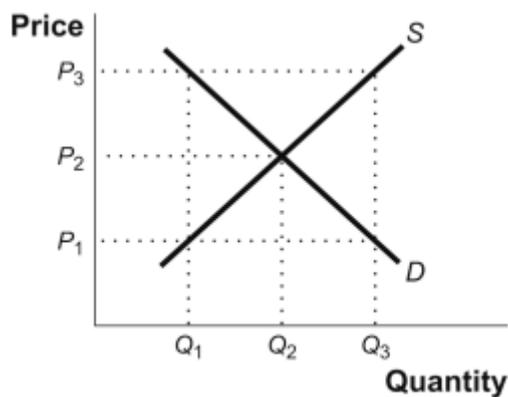


Name: _____ Date: _____
Version A with answers

1. When the San Francisco city manager faces a complaint that the city council chamber podium is not accessible to individuals with disabilities, he responds that the one million dollar improvement will not happen because “that money could be spent building 70 curb ramps.” This statement best represents the economic concept of:
 - A) resources are scarce.
 - B) the real cost of something is what you must give up to get it.
 - C) “how much?” is a decision at the margin.
 - D) when markets don't achieve efficiency, government intervention can improve society's welfare.

Use the following to answer question 2:

Figure: Supply, Demand, and Equilibrium



2. (Figure: Supply, Demand, and Equilibrium) In the figure, there will be an excess demand of the good at a price of P_3 .
 - A) True
 - B) False

Use the following to answer question 3:

Table: Wages and Hours Worked

Point	Wage	Hours Worked
A	6	0
B	8	5
C	12	20
D	20	40
E	30	45

3. (Table: Wages and Hours Worked) The table shows data on wages per hour and number of hours worked. Graphing the relationship with wages on the vertical axis and hours worked on the horizontal axis, the slope between point *D* and point *E* is:
- A) 0.5.
 - B) 5.
 - C) 45.
 - D) 2.
4. “In 2008, air travel decreased substantially despite significant reductions in ticket prices.” If this information is correct, then it indicates that the law of demand did not apply to air travel in 2008.
- A) True
 - B) False
- Answer: is False because lot of other things were going on a well (e.g. declining income) causing the downward-sloping demand curve to shift to the left.
5. If an economy has used up all opportunities to make someone better off (without making someone else worse off) then it has achieved _____.
- A) equity
 - B) opportunity cost
 - C) marginal optimality
 - D) efficiency

Use the following to answer question 6:

Table: Production Possibilities Schedule I

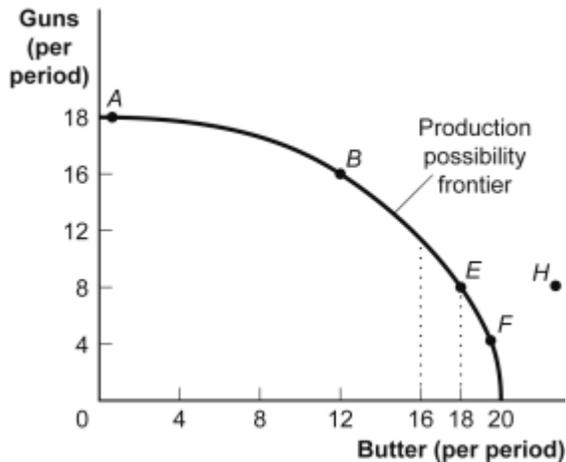
Alternatives	<i>A</i>	<i>B</i>	<i>C</i>	<i>D</i>	<i>E</i>	<i>F</i>
Consumer goods per period	0	1	2	3	4	5
Capital goods per period	30	28	24	18	10	0

6. (Table: Production Possibilities Schedule I) If the economy produces 10 units of capital goods per period, it also can produce at most _____ units of consumer goods per period.
- A) 5
 - B) 4
 - C) 3
 - D) 2
7. In one day, Kessy can bake 10 cookies or mix 15 glasses of lemonade. His friend, Ava, can make 10 cookies or 10 glasses of lemonade. His other friend, Ian, can make 10 cookies or 20 glasses of lemonade. Who has the lowest opportunity cost in cookie production?
- A) Kessy
 - B) Ava
 - C) Ian
 - D) Kessy and Ava have the same opportunity cost in cookie production.
8. In 2003, Congress passed a tax cut. Since taxes were reduced, the country did not incur any opportunity cost from this decision.
- A) True
 - B) False
9. Market failure occurs when the pursuit of self-interest leads to bad results.
- A) True
 - B) False

The question can be re-phrased as if A then B, where A= self interest leads to bad results, and B= market failure. The pursuit of self interest could result in a bad but that bad might or might not be inefficiency, it could be bad only in a unfair sense of the word. So, strictly speaking, the answer is False. That said, if “bad” is defined as inefficient, the answer is True. We accepted both answers.

Use the following to answer question 10:

Figure: Guns and Butter



10. (Figure: Guns and Butter) If the economy were operating at point *B*, producing 16 units of guns and 12 units of butter per period, a decision to move to point *E* and produce 18 units of butter:
- A) indicates you can have more butter and guns simultaneously.
 - B) makes it clear that this economy experiences decreasing opportunity costs.
 - C) involves a loss of 8 units of guns per period.
 - D) involves a loss of 4 units of guns per period.
11. If the price of gasoline falls and stays low for an extended period of time, we expect people to:
- A) reduce their reliance on gasoline-powered cars.
 - B) buy larger and less fuel-efficient cars.
 - C) use more public transportation.
 - D) ride bicycles.
12. *Market failure* refers to a situation in which:
- A) markets fail to reach a fair outcome.
 - B) markets establish a high price for necessities.
 - C) market-determined wages are not high enough to raise all workers above the poverty line.
 - D) markets fail to reach an efficient outcome.

13. If the United States is more productive than Mexico in all lines of production, then the United States cannot benefit from trade with Mexico.
- A) True
B) False

Use the following to answer question 14:

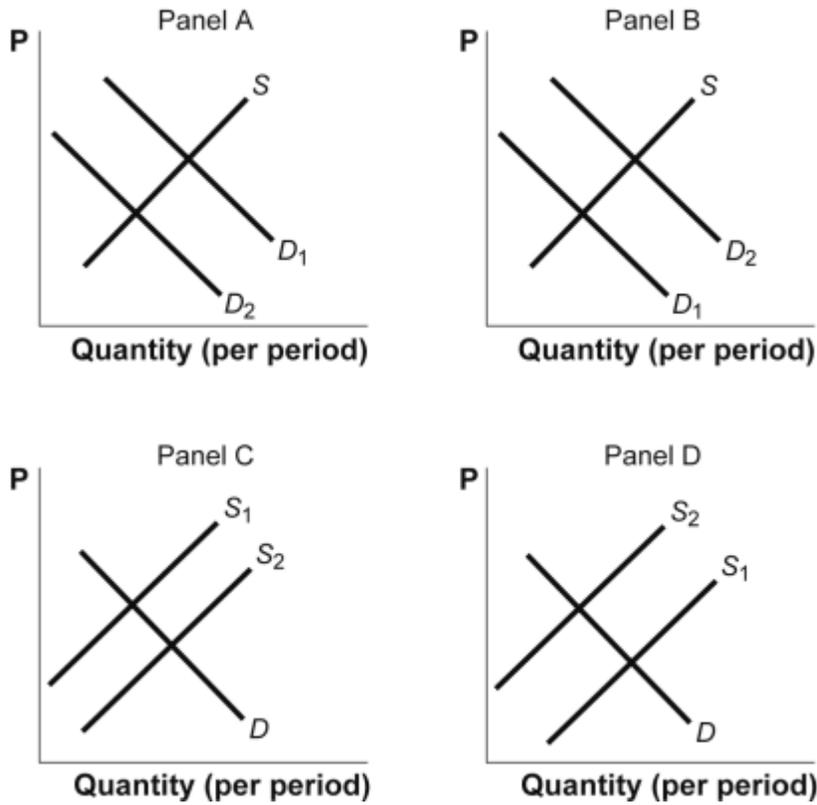
Table: The Lemonade Market

Price of Lemonade (per cup)	Number of Cups Demanded (Qd)	Number of Cups Supplied (Qs)
\$.50	250	25
\$.75	200	50
\$1.00	150	75
\$1.25	100	100
\$1.50	50	125
\$1.75	20	150

14. (Table: The Lemonade Market) If the price of a cup of lemonade is \$1.00, what will exist in the market?
- A) equilibrium
B) a shortage of 150 cups
C) a shortage of 75 cups
D) a surplus of 75 cups
15. The market for gasoline is in equilibrium. You have heard that the price of crude oil is falling because of new oil discoveries. You are also aware that the number of car and truck drivers is steadily rising. Knowing this, you predict that the price of gasoline will _____ and the quantity of gasoline bought and sold will _____.
- A) rise; rise if the demand increase is larger than the supply increase
B) rise if the demand decrease is larger than the supply decrease; fall
C) fall if the supply increase is larger than the demand increase; rise
D) rise; rise
16. If demand decreases and supply increases, the direction of change in the equilibrium quantity is unpredictable without first knowing the relative magnitudes of the demand and supply changes.
- A) True
B) False

Use the following to answer question 17:

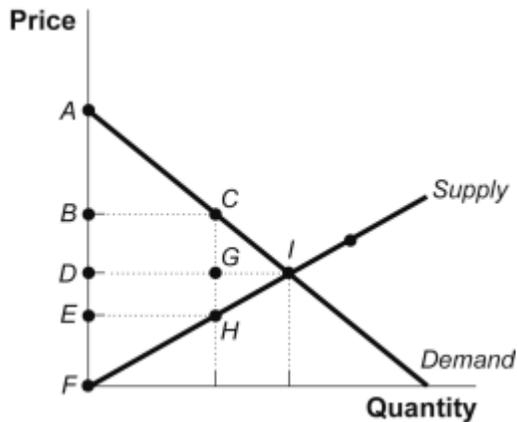
Figure: Shifts in Demand and Supply IV



17. (Figure: Shifts in Demand and Supply IV) The figure shows how supply and demand might shift in response to specific events. Suppose consumer incomes increase. Which panel best describes how this will affect the market for big-screen televisions, a normal good?
- A) Panel A
 - B) Panel B
 - C) Panel C
 - D) Panel D

Use the following to answer question 18:

Figure: Market in Equilibrium



18. (Figure: Market in Equilibrium) At the equilibrium price, this market's total producer and consumer surplus equals the area:
- A) *BCDG*.
 - B) *AIF*.
 - C) *DIF*.
 - D) *ADI*.
19. If the supply and demand curves intersect at a price of \$47, then any price above that would result in a(n):
- A) shortage.
 - B) surplus.
 - C) equilibrium.
 - D) increase in demand.
20. If the cost of soybeans (the major ingredient in tofu) decreases, consumer surplus in the market for tofu will decrease.
- A) True
 - B) False
21. The U.S. production possibility frontier will _____ if all computers using Microsoft operating systems contracted a virus that deleted all information on those computers.
- A) shift in
 - B) shift out
 - C) not change
 - D) Cannot be determined from the information provided.

22. Khalil is offered a free ticket to the opera. His opportunity cost of going to the opera is:
- A) zero—the tickets were free.
 - B) the price listed on the ticket.
 - C) whatever Khalil would have done had he not gone to the opera.
 - D) the price listed on the ticket or whatever Khalil would have done had he not gone to the opera.

An irrelevant issue, that some thought relevant, was whether Khalil had time to sell the ticket. The answer is C whether he had time to sell it or not. If he did not go to the Opera, selling the ticket might have been one of the things he had **done**. Note that if he sold it, it would not necessarily be for the sticker price.

23. If every individual was required to be self-sufficient:
- A) living standards would fall.
 - B) living standards for some individuals would fall but, for others, they would rise.
 - C) living standards would rise.
 - D) it's impossible to say how living standards would change.
24. A market equilibrium will always be efficient even if it is not equitable.
- A) True
 - B) False

Use the following to answer question 25:

Table: Willingness to Pay for Peanuts

Consumer	Willingness to Pay in Dollars
Alvin	\$5
Theodore	3
Simon	6
Dave	2
George	10

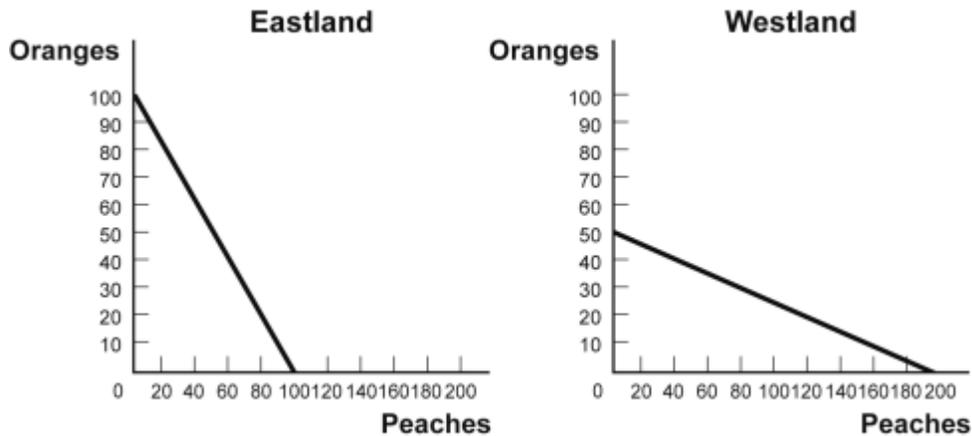
25. (Table: Willingness to Pay for Peanuts) If the price of a bag of peanuts is \$9, who will purchase a bag?
- A) George
 - B) All of the consumers
 - C) Dave
 - D) Alvin and Theodore

26. A choice made _____ is a choice whether to do a little more or a little less of something.
- A) at the front end
 - B) in the beginning
 - C) at the margin
 - D) *ceteris paribus*
27. A typical, bowed-out production possibility frontier between two goods—guns and butter—shows that the opportunity cost of butter in terms of guns increases as more butter is produced. This implies that the opportunity cost of guns in terms of butter decreases as more guns are produced.
- A) True
 - B) False

Use the following to answer question 28:

Figure: Comparative Advantage

Eastland and Westland produce only two goods, peaches and oranges, and this figure shows each nation's production possibility frontier for the two goods.



28. (Figure: Comparative Advantage) Eastland has a comparative advantage in producing:
- A) oranges only.
 - B) peaches only.
 - C) both oranges and peaches.
 - D) neither oranges nor peaches.

29. Because Casey can type reports faster and more accurately than Ahmet, Casey has a(n) _____ in typing reports.
- A) comparative advantage
 - B) absolute advantage
 - C) opportunity cost
 - D) specialization
30. A consumer's willingness to pay for a surfboard is the minimum price at which he or she would buy the surfboard.
- A) True
 - B) False
31. Whenever a choice is made:
- A) the cost of that choice could be referred to as opportunity cost.
 - B) the cost is easy to measure in dollar terms.
 - C) efficiency is improved.
 - D) scarcity is not the problem.

32. A market is composed of three individuals, Nicholas, Benjamin, and Alexander. Their individual demand schedules are given below and are as follows:

Nicholas		Benjamin		Alexander	
Price	Quantity Demanded	Price	Quantity Demanded	Price	Quantity Demanded
1	10	1	15	1	12
2	9	2	11	2	10
3	8	3	9	3	8

Based on this information, which of the following market demand schedules accurately portrays this market?

A)

Price	Quantity Demanded
1	27
2	35
3	30

B)

Price	Quantity Demanded
1	20
2	15
3	25

C)

Price	Quantity Demanded
1	37
2	30
3	25

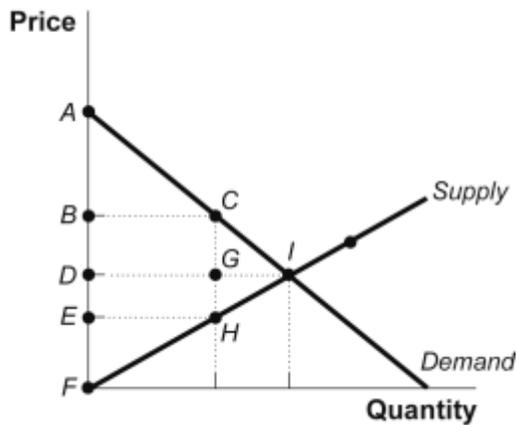
D)

Price	Quantity Demanded
1	25
2	30
3	10

33. If the government imposes a binding price ceiling in the market for grapefruit, total surplus:
- A) will increase.
 - B) will decrease.
 - C) will not change.
 - D) may change, but we cannot determine the change without more information.
34. Economists may disagree about policies because:
- A) they may approach the issue using different sets of values.
 - B) they may be using different economic models.
 - C) they enjoy disagreeing with each other.
 - D) they may approach the issue using different sets of values and because they may be using different economic models.
35. How people choose among the alternatives available to them is:
- A) not part of the study of economics.
 - B) impossible to describe.
 - C) the study of microeconomics.
 - D) not important.

Use the following to answer question 36:

Figure: Market in Equilibrium



36. (Figure: Market in Equilibrium) At the equilibrium price, this market's consumer surplus is equal to the area:
- A) *ABC*.
 - B) *ADI*.
 - C) *DIF*.
 - D) *EHF*.

Use the following to answer question 37:

Table: Workouts

Number of Workouts (per week)	Willingness to Pay for Workouts
1	\$35
2	30
3	25
4	20
5	15
6	10
7	5

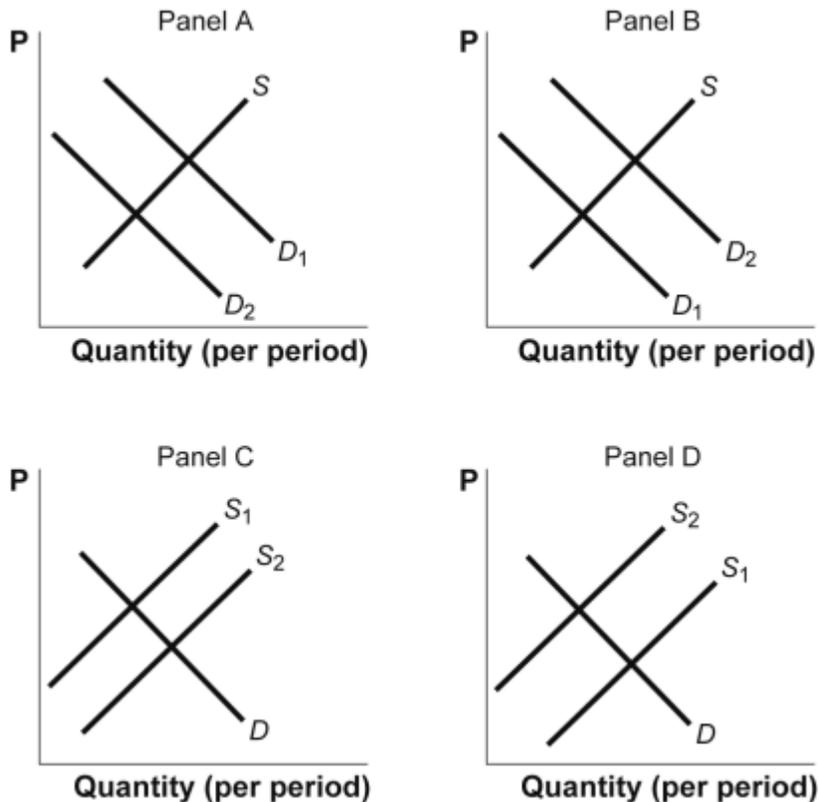
37. (Table: Workouts) Several times each week Eli works out at a local health club, but because he is not a member, he pays a price of \$10 each time he shows up to use the club facilities. The table shows Eli's willingness to pay for each use of the club. How many times will Eli use the health club for a workout, and how much consumer surplus does he receive?
- a. five times and a receive a consumer's surplus of \$75
 - b. six times and receive a consumer's surplus of \$70
 - c. six times and receive a consumer's surplus of \$75
 - d. five times and receive a consumer's surplus of \$70
38. Suppose the state of Oklahoma decides to produce only two goods—oil and football helmets. As oil production increases, the production of football helmets will:
- A) increase.
 - B) not sure.
 - C) decrease at a decreasing rate.
 - D) decrease.

Answer: if the question specified that Oklahoma was operating on it PPF, the production of footballs would decrease. But if they are not on the PPF, the production of both oil and footballs could increase.

39. One of the controversies surrounding America's energy markets is the trade-off between energy production and clean air. Assuming clean air has value, the United States will be on its production possibility frontier if and only if:
- A) resources used to create clean air and energy are not being fully utilized.
 - B) pollution is eliminated.
 - C) the price of energy is relatively low.
 - D) resources used to create clean air and energy are being fully utilized.
40. An ambiguous change in price and a decrease in quantity are most likely caused by:
- A) no shift in supply and a shift to the left in demand.
 - B) a shift to the left in supply and a shift to the left in demand.
 - C) a shift to the right in supply and a shift to the left in demand.
 - D) a shift to the left in supply and a shift to the right in demand.

Use the following to answer question 41:

Figure: Shifts in Demand and Supply IV



41. (Figure: Shifts in Demand and Supply IV) The figure shows how supply and demand might shift in response to specific events. Suppose the Surgeon General announces that eating chocolate prevents heart disease. Which panel best describes how this will affect the market for chocolate?
- A) Panel A
 - B) Panel B
 - C) Panel C
 - D) Panel D

Answer Key

1. B
2. B
3. D
4. B
5. D
6. B
7. B
8. B
9. A or B
10. C
11. B
12. D
13. B
14. C
15. C
16. A
17. B
18. B
19. B
20. B
21. A
22. C
23. A
24. B
25. A
26. C
27. B
28. A
29. B
30. B
31. A
32. C
33. B
34. D
35. C
36. B
37. A or C
38. B
39. D
40. B
41. B

42. According to US Law, the appropriate measure of damages used to compensate victims for the damages caused by those injuries is
- Willingness to accept: what those damaged would pay to restore the resource to its pre-injury state.
 - Willingness to accept: what those damaged would have to be compensated to agree to not restore the resource to its pre-injury state.
 - Willingness to pay: what those damaged would have to be compensated to agree to not restore the resource to its pre-injury state.
 - Willingness to pay: what those damaged would pay to restore the resource to its pre-injury state.

Answer d. Note that *injuries* are the physical and biological effects on the resources and people. *Damages* are a measure of how people are affected by injuries. Knowing that it is the willingness to pay comes from Morey's lecture on 9/24. The law assumes that this willingness to pay is easier to estimate than willingness to accept. Willingness to pay is how much you would pay to restore the resource to its pre-injury state.

43. Would Paul and Robin agree, or disagree with the following statement: "The creation of a second-hand market for our textbook is efficiency increasing even though it makes Paul and Robin worse off."
- Yes
 - No
 - Maybe

Answer: they would say that the creation of the market had the potential to make everyone, including themselves, better off, so creating the second-hand market is efficiency increasing. To make everyone better off would have required that the buyers and sellers of the books throw some change their way, but this is not required for efficiency to increase. The creation of the market is what we will learn to call a *Potential Pareto Improvement*.

44. Consider the WTP of a student in our class for a second hardcopy of the KW textbook. Which of the following statements is most correct?
- His wtp for a second copy is likely zero
 - We do not know his wtp for a second copy**
 - His wtp for a second copy is positive.

Answer: he might or might not have a positive wtp for the second copy; he might not even have a positive WTP for a first hard copy.

45. You snuck up behind me and kissed me on the cheek; then you gave me a cigar. This exchange is

- a. Efficiency increasing
- b. Efficiency decreasing
- c. Don't know**

Answer: It definitely makes you better off; otherwise, why would you have done it? I might or might not consider myself better off, or might not care either way. The fact that your action was done without my prior permission does not imply I am worse off because of it, or imply I am worse off because of it.

46. If the market price of a good decreases, consumer's surplus cannot decrease.

- a. **True**
- b. False
- c. Maybe

Answer: I first wrote: "increases" rather than "cannot decrease" but decided it did not have to increase. Consider the following example where it would not decrease. Production costs are so high that at a price that would cover the production cost demand is zero. Then if the price declines but not by enough to make demand positive, consumer's surplus will remain at zero (not decrease, but also not increase).

47. You can buy a used copy of the text for \$30. Would your consumer's surplus from the book be higher if the answers to the exam questions were written in the back of the book?

- a. Yes
- b. No

Answer: the question is about you, so either answer is fine with me. Only you know whether having the answers makes you better or worse off. You would get a better grade on the exam, but you also might consider yourself a cheater.

48. My WTA for an additional ice-cream cone – I always like another ice-cream cone – is negative.

- a. **True**
- b. False

c. Not clear.

Answer: WTA is how much money I would have to be given to consume an additional cone. Since an additional cone is, for me, a good, not a bad, my WTA is negative; I would pay, I would not have to be paid. This is a difficult question designed to separate the women from the girls.

49. I have a ton of old newspapers in my office – I like them there, Sally, my wife, does not. The current situation is inefficient because? Choose the best possible answer:

- a. It is not right for me to clutter up our home with yellowing newspapers
- b. Sally's WTP for their removal is less than my WTA their removal
- c. Sally's WTP for their removal is more than my WTA their removal.**
- d. Sally's WTP for their removal is more than my WTP to keep them around

Answer: Answer a. is about what is right, and wrong, not about what is efficient. Wrt b.: if Sally's WTP for their removal is less than my WTA their removal then the current situation is efficient. Wrt c.: if she is willingness to pay more than I would need to be paid to voluntarily remove them, then keeping them around is inefficient. Wrt d: it is not clear.

50. I produced a ski trip to Vail and consumed the trip – I went skiing at Vail. Doing it made me better off. Choose the best way to complete the sentence, "I got

- a. A consumer's surplus because I consumed the trip.
- b. A producer's surplus because I produced the trip.
- c. A surplus from the trip

Answer: A surplus, but it is not informative to label it as either a consumer's surplus or a producer's surplus: I was both the producer and consumer.

51. That many poor people lack medical insurance is a failure of the market (a *market failure*).

- a. True
- b. False**

Answer: Poor people do not buy many things; this is because they lack money. This is the market working, not failing. Some might view it as unfair (inequitable) but it is likely efficient. The market says it is inefficient to consume product x if your WTP to consume it is less than the cost of producing it.

52. There is a downward sloping demand curve for widgets, but the supply of widgets is fixed (the supply does not depend on the price). The market for widgets is in equilibrium. Which of the following statements is correct and most informative?

- a. The supply curve is horizontal and the producer's surplus is zero, and the consumer's surplus is positive.
- b. Both the producer's surplus and the consumer's surplus are positive.
- c. **The supply curve is vertical, the producer's surplus is positive, and the consumer's surplus is positive.**

53. Assuming you are a skier, if Eldora Ski area improves in quality (puts a new high-speed lift and improved snowmaking equipment), your demand curve for trips to Winter Park Ski area will likely

- a. Shift to the right
- b. Shift to the left**
- c. Not shift
- d. It depends.

Answer: Winter Park ski area now has a better substitute to compete with, so at every cost you will likely take fewer trips to Winter Park. (Because you are skiing more at Eldora) – this would be a shift to the left. If you truly are wedded to WP, your demand curve for WP will not shift. So we will accept b or d. And, do a better job next time wording the question.

54. Bob, the bear, and Edward, the great white hunter, are the only ones left: everyone else is dead – swine flu. Edward, the hunter, likes to run around in the woods trying to shoot Bob: it increases Edward's utility. Fortunately for Bob, Edward is a bad shot, so Bob never gets shot. That said, Bob does not like to be shot at: it makes him both mad and sad. Currently Edward spends 8 hours a day running around in the woods shooting at Bob. Which of the following options is correct and might be a good description of what is going on?

- a. The amount of shooting is inefficient because life sucks for Bob and both Bob and Edward are members of society.
- b. The amount of shooting is inefficient because Edward would be better off if he spent more time shooting at Bob.
- c. The amount of shooting is efficient because both Bob and Edward are members of society and they are in a situation where the only way to make either better off requires that the other be made worse
- d. The amount of shooting is efficient because Edward is not a member of society, so it does not matter what Edward wants.

Answer: c. for the following reasons: If both Bob and Edward are members, and the only way to make one better off requires the other is made worse off (more or less shooting), the current amount of shooting is efficient. Wrt a.: If both Bob and Edward are members, the allocation is efficient not inefficient. Wrt b.: whether it is efficient or inefficient

depends on who are members. If Edward is and Bob is not, then the currently amount of shooting might or might not be efficient (if Edward would like to shoot more, it is inefficient.). Wrt d: It would be correct, if in d. "Edward" was replaced by "Bob."

55. An individual or country that has a comparative advantage in the production of one good:
- Must have an absolute advantage in that good's production.
 - Must not have an absolute advantage in that good's production.
 - May or may not have an absolute advantage in that good's production.
 - Must not have an absolute advantage in the production of the other good.

Answer: c

Explanation: Having an absolute advantage is not the same thing as having a comparative advantage. Even if an individual has an absolute disadvantage in producing both goods, he or she can't have a comparative advantage in producing both goods. An individual who has a comparative advantage in the production of one good, may or may not have an absolute advantage in the production of that good.

56. Assume there are only two goods that can be produced: green beans and corn. If the opportunity cost of one bushel of corn is $\frac{3}{5}$ bushel of green beans, then the opportunity cost of 1 bushel of green beans is
- $\frac{5}{3}$ bushels of corn.
 - $\frac{2}{5}$ bushel of corn.
 - $\frac{5}{2}$ bushels of corn
 - $\frac{8}{5}$ bushels of corn.

Answer: a. $\frac{5}{3}$ bushels of corn.

Explanation: The opportunity cost of 1 bushel of green bean can be easily calculated by reversing the opportunity cost of 1 bushel of core, making $\frac{3}{5}$ to $\frac{5}{3}$. The concept of the opportunity cost is the amount of one good to be given up in order to produce one more unit of the other good, if there are only two goods to be produced.

57. Suppose that your tuition to attend college is \$5,000 per year and you spend \$1,000 per year on book costs, and \$4,000 per year on house rent. If you were working full time instead, you could earn \$20,000 per year. What is your opportunity cost of attending college for one year?
- \$ 20,000
 - \$ 24,000
 - \$ 25,000

- d. \$ 26,000
- e. \$ 30,000

Answer: d

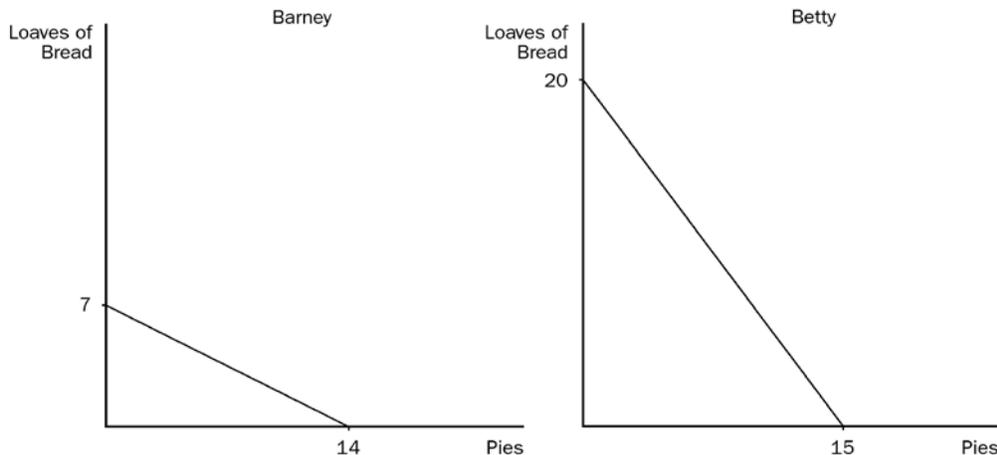
Explanation: The opportunity cost of attending college is the cost that you must give up to get college education. First, you must count on the potential income that you would have earned if you worked instead of spending your time around college, that is, \$20,000 per year. Second, you need to consider the opportunity cost as the money that you pay for college costs such as tuition and book costs, that is \$6,000. However, rent is not an opportunity cost because you must pay it for a living regardless of whether you work or not. If you argue that rent would be more or less if you lived in a work town, the answer would be neither d. nor e.

58. Which of the following would be likely to raise your opportunity cost of attending the big football game this Sunday night?
- a. A friend calls you up and offers you free tickets to a concert by one of your favorite bands on Sunday night.
 - b. Your employer offers you double your usual wage to work this Sunday night.
 - c. Late Friday afternoon, professor Morey makes a surprise announcement that there will be a major exam on Tuesday morning.
 - d. All of the above.

Answer: d

Explanation: The opportunity cost is what you should give up to choose an option. The above are all things you would increase the cost of going to the game (missed concert, missed money, missed exam points).

59. According to the followings graph for Barney's production of bread and pies, and Betty's graph for the production of bread and pies,



The opportunity cost of 1 loaf of bread for Barney is

- a. 1/4 pie
- b. 1/2 pie
- c. 1 pie
- d. 2 pies

Answer: d

Explanation: The slope of Barney's PPF is $-1/2$. It means that he can produce $1/2$ unit of bread by giving up one unit of Pie. Going the other way, he can produce 1 loaf of bread by giving up 2 pies. This fact is exactly the definition of the opportunity cost of 1 loaf of bread.

60. The following graph plots supply and demand curves for surfboards in Hawaii. The demand curve is $P = 7 - 2Q$. The supply curve is $P = 3 + 2Q$. What values of P and Q are the equilibrium values?

- a. $P=1, Q=5$
- b. $P=5, Q=1$
- c. $P=2, Q=4$
- d. $P=4, Q=4$

Answer: b

Explanation: $7-2Q = 3+2Q \rightarrow 4=4Q$, so $Q=1$. Therefore, $P=7-2=5$.