1. Consider the statement, "The slope of an indifference curve (budget line) for goods A and B indicates the rate at which the individual (the market) substitutes good A for Good B." This statement is
   A) not enough information to determine whether it is true or false.
   B) true
   C) false

2. In lecture, we looked at an example where Professor Morey's daughter, Fred, was paid $1 per mile skied. Fred's only cost was the value of her time, $3 an hour. In order to maximize profit, Fred will ski up to the point where it cost her $3 to ski her last mile.
   A) True
   B) False

3. Assume that Brooke is maximizing her utility and consuming a positive amount of Bud Lite. Then the market price of Bud Lite decreases, Brooke's downward-sloping demand curve for the Bud Lite remaining the same, her consumer's surplus associated with Bud Lite increases.
   A) No
   B) Maybe
   C) Yes

4. An individual is more likely to free ride when a good is:
   A) artificially scarce.
   B) private.
   C) nonexcludable.
   D) nonrival.
5. (Figure: Three Firms) Three firms in a small city are responsible for emitting pollution, and the marginal benefit of the individual polluters is shown in the figure. If the city imposes a tax of $400 per ton of pollution, Firm B will produce ________ while Firm A will produce ________ of mercury and Firm C will produce ________
A) 600 tons; 400 tons; 900 tons
B) 300 tons; 500 tons; zero tons

6. A move to Commerce City from Boulder would make you worse off. Your WTA the move is bounded from above by your income/wealth.
   A) True
   B) False

7. Let d denote Diet Cokes and c chocolate bars. At my current consumption level my \( MRS_{dc} = 3 \). So, my wtp for an additional Diet Coke is 3 chocolate bars.
   A) True
   B) False

8. Marginal social cost of an action is the cost of the action that the producer of the action does not pay
   A) True
   B) False
9. In a society that consists of one individual, which statement best describes the allocation of resources that is socially optimal
   A) The allocation is efficient
   B) It is an equilibrium
   C) The individual is doing well
   D) The individual is doing the best they can given their constraints

10. George steals your wallet, making himself better off, and you worse off. Before the theft took place the allocation of resources was necessarily efficient.
   A) True
   B) False

11. Ice cream is congestible.
   A) True
   B) False

12. A private good is:
   A) nonexcludable and rival in consumption.
   B) excludable and nonrival in consumption.
   C) excludable and rival in consumption.
   D) nonexcludable and nonrival in consumption.

13. In our story about taming the Wild West, the arrival of John Wayne decreased the farmer's cost of protecting his property rights.
   A) True
   B) False

14. My demand for cigars is \( C = 12 - 3P \) where \( P \) is the price of cigars and \( C \) is the number of cigars I purchase and smoke. Assume the current price of cigars is $2/cigar. Given my demand curve, I choose to consume 6 cigars. My total willingness-to-pay for these 6 cigars is
   A) $12
   B) $6
   C) $18
   D) Not enough information to tell.
15. Consider Carpenter Bill's supply curve (price on the vertical axis) for rocking chairs. The market price for rocking chairs doubles from $20 to $40. This will _____
   A) cause Bill's supply curve for rocking chairs to shift to the right
   B) cause Bill's supply curve for rocking chairs to shift to the left.
   C) not shift Bill's supply curve for rocking chairs

16. Assume there cigarette smoking produces a negative external effect (second-hand smoke). The government reacts to this situation by setting a tax on cigarette smoking such that with the tax included the marginal cost of smoking for the smoker is greater than the marginal cost to society from his smoking. In this case, the smoker will smoke too little from society's perspective.
   A) True
   B) False

17. If government officials set an emissions tax too high:
   A) the amount of pollution will necessarily be less efficient than if there was no emissions tax
   B) there will be too little pollution from a social efficiency perspective
   C) there will be too much pollution from a social efficiency perspective
   D) the marginal social cost of pollution will exceed the marginal social benefit of pollution.

18. Wilma, a rational economic agent, consumes only two goods: torrid romance novels and beer. She had just achieved the utility-maximizing solution in her consumption of the two goods, then the price of torrid novels rises. Adjusting to this event, she will consume:
   A) not sure
   B) less novels and more beer.
   C) more novels and less beer.
   D) less beer and less novels

19. You come home to find that your dog, Killer, is missing. Where he once sat is a ransom note: "$500.00 or Killer dies." You have $500.00 in savings earmarked for a new bike. You pay the ransom with that $500. What is the opportunity cost of your decision?
   A) the bike and a dead Killer
   B) the bike
   C) the bike and a live Killer
   D) a dead Killer
20. Consider the statement, "Pandas are valuable and should be saved from extinction, even though people do not care one way or the other about pandas." This notion of "value" is consistent with how economists define value.  
A) True  
B) False

21. The model/theory generated the prediction that *George knows calculus but not algebra.* Which set of the following assumptions mostly likely generated this prediction.  
A) Assume George is alive. Assume no living person knows algebra.  
B) Assume only God knows algebra. Assume George is not God. Assume everyone who's name starts with "G" knows calculus  
C) Assume everyone know calculus. Assume God does not go by the name of George. Assume God knows algebra  
D) Assume George never took an algebra course. Assume it is impossible to know algebra unless you have taken an algebra course.

22. If society's allocation of resources and distribution of goods is efficient, it still might be possible to increase the production of good X without decreasing the production of any other good.  
A) True  
B) False

23. The benefit to society of an additional unit of a public good is the net benefits to all members of society from that additional unit.  
A) True  
B) False

24. Assume, for example, the following demand function for Steven's ski days at Steamboat ski area: 
\[ D_{ssb} = 20 + 0.03 \text{Snow}_{ssb} - 0.06 P_{ssb} + 0.01 P_{vail} \]
Where \( D_{ssb} \) is the individual's demand, this year, for Steamboat ski days. \( \text{Snow}_{ssb} \) is Steamboat's total snow fall, last year, in inches. \( P_{ssb} \) is the cost of a steamboat ski day, measured in dollars. \( P_{vail} \) is the cost of a vail ski day, measured in dollars. If the cost of a vail ski day rises from $50 to $100, then Steven's demand function for Steamboat ski days (dollar on the vertical axis) will  
A) not shift; instead, Steven will move along his demand curve downward and to the right.  
B) not shift; instead, Steven will move along his demand curve upward and to the left.  
C) shift to the left.  
D) shift to the right.
Use the following to answer question 25:

<table>
<thead>
<tr>
<th>Output</th>
<th>Total Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>$ 10</td>
</tr>
<tr>
<td>1</td>
<td>60</td>
</tr>
<tr>
<td>2</td>
<td>80</td>
</tr>
<tr>
<td>3</td>
<td>110</td>
</tr>
<tr>
<td>4</td>
<td>170</td>
</tr>
<tr>
<td>5</td>
<td>245</td>
</tr>
</tbody>
</table>

25. (Table: Total Cost and Output) The table describes Bart's perfectly competitive ice cream-producing firm. If the market price is $67.50, how many units of output will the firm produce?
   A) Three
   B) One
   C) Four
   D) Two

26. Because Americans eat a lot of meat, and because meat production uses more resources to produce than other types of food, food production in the U.S. is inefficient.
   A) True
   B) False

27. In the theory of the firm, we use "isoquants". Breaking down the term we have "quant" as in "quantity," and "iso" as in "one," meaning every point on an isoquant corresponds to the same quantity. The analogous concept in regards to consumer theory is_______.
   A) An Indifference curve
   B) Preferences
   C) A budget line
   D) Utility

28. My demand curve for cigars, per day, is C=10-2P, where P is the price of a cigar and C is the number of cigars I buy and smoke. Assume the current price is $5/cigar. My total willingness-to-pay for cigars is
   A) $0
   B) $13.50
   C) not enough information to answer the question
   D) $25
29. Melvin is the only guy town selling "medical" marijuana--he is a monopolist and demand is strong. He can sell 3 tons at $9k a ton, but if he lowers his price from $9K a ton to $8K a ton he can sell 4 tons. For Melvin, the marginal revenue associated with the 4th ton is
A) $32K
B) $5K
C) Not enough information to figure it out
D) $1K

30. George makes candy bars; production requires two inputs: chocolate, c, and sugar, s. The constant $MRTS_{cs} = \frac{3}{4}$. George will likely use both chocolate and sugar to produce his candy bars
A) True
B) False

31. You go to college. It costs money, precludes you from working, and is more stressful than not going to college. Given this, tranquility is part of the opportunity cost of going to college.
A) True
B) False

32. Branding cattle helps to maintain and enforce property rights.
A) True
B) False

33. If both the demand and supply curves for peanut butter ($ on the vertical axis) shift left
A) Equilibrium price will fall but we cannot say what will happen to equilibrium quantity
B) Equilibrium quantity will fall but we cannot say what will happen to equilibrium price
C) Equilibrium price will rise but we cannot say what will happen to equilibrium quantity
D) Equilibrium quantity will rise but we cannot say what will happen to equilibrium price
34. Public goods should be produced up to the point at which the marginal cost of production equals:
   A) the highest marginal benefit from any individual consumer of the good.
   B) the maximum price any individual is willing to pay for that unit.
   C) the sum of the individual marginal benefits from all consumers of that unit.
   D) zero, which is the marginal cost of allowing another individual to consume the good.

35. Texas executes a lot of inmates. According to an article in "The Onion," Texas has passed a new law to eliminate the traditional last meal offered to death row inmates. Spicey John's BBQ had been a favorite last meal choice. The new legislation will:
   A) Raise the equilibrium price and raise the equilibrium quantity of meals at Spicy John's
   B) Lower the equilibrium price and lower the equilibrium quantity of meals at Spicy John's
   C) Raise the equilibrium price and lower the equilibrium quantity of meals at Spicy John's

36. Imagine Boulder is required by the Federal Government to reduce its toxic emissions from dry-cleaning facilities by 20%. The Boulder City Council achieves this goal by requiring every such facility in Boulder to reduce their toxic emissions by 20%. Which alternative most likely describes the result?
   A) The total emissions reduction is achieved, but not at minimum cost
   B) The total emissions reduction s achieved at minimum cost

37. Thelma's love for Wayne never waned.
   A) True
   B) False

38. With respect to the allocation of public goods the market fails
   A) True
   B) False
39. "Competitive markets achieve efficiency." Choose the answer that is both correct and most informative.
   A) The statement is too strong. Competitive markets are often efficient, but there are significant exceptions.
   B) This statement is true and is the foundation for our belief in the supremacy of the market economy.
   C) Economics professors often say this.
   D) This statement is false.

40. When production in a society is efficient, it is still often possible to make some members of society better off, without making any other members worse off.
   A) True
   B) False

41. Willy can only produce apples and carrots. Willy's production-possibilities frontier can be represented with the function $C=20-3A$ where $C$ is the number of carrots he produces and $A$ is the number of apples he produces. For Willy, the opportunity cost of producing a carrot is ___ and the opportunity cost of producing an apple is ___
   A) 1/3 apple, 3 carrots
   B) 3 apples, 3 carrots
   C) 1 carrot, 2 apples
   D) 3 apples, 1/3 carrot

42. For an economist, the statement, "I value my friendship with Marc more than I value my friendship with Don." simply means my WTA the loss of Marc as a friend is greater than my WTA the loss of Don as a friend.
   A) True
   B) False
43. Imagine the U.N. requires that total carbon dioxide emissions of China and the U.S. be reduced by 100 units. 100 units of carbon dioxide emissions is a small percentage of each country's current carbon dioxide emissions. Imagine that in the 100 unit range, the cost, on the margin, of reducing carbon emission is always higher in the U.S. than in China. This is likely to be the case because the U.S. tends to produce heat and energy using methods that are less carbon intensive. Given all this, which of the following statements is both most likely and most informative.

A) The cost-minimizing way to achieve the required reduction is for the reduction to occur in the U.S. because production is more efficient in the U.S. than in China.
B) Reducing carbon dioxide emission by 100 units in China (zero units in the U.S.) will cost the least in terms of the world's scare resources because, in the relevant range, the marginal cost of abatement is always lower in China.
C) The cost-minimizing way to achieve the required reduction is for some of the reduction to occur in the U.S. and for some of it to occur in China.
D) Efficiency requires that the 100 unit reduction be achieved by reducing emissions by 100 units in China and zero units in the U.S because China now produces more carbon dioxide emissions than does the U.S.

44. Ingrid, when she is in Sweden, and not skiing for CU, consumes only pickled herring and Aquavit (a Swedish type of booze). She is indifferent to the amount of pickled herring she eats, but the more the better for Aquavit. Consider her indifference curves with Aquavit on the vertical axis and herring on the horizontal axis

A) Ingrid's indifference curves are vertical lines
B) Ingrid's indifference curves are downward sloping
C) Ingrid's indifference curves are upward sloping
D) Ingrid's indifference curves are flat (horizontal lines)

45. Since texting while driving generates a negative external effect (it makes the roads less safe for others), banning texting while driving would necessarily be efficiency increasing.

A) True
B) False

46. Assume there are 5 identical firms in a perfectly-competitive market, each with the marginal cost curve MC=0.5Q. When the market price is 500, the total supply of this five-firm economy will be___.

A) 250
B) 1000
C) 5000
D) 500
Use the following to answer questions 47-50:

<table>
<thead>
<tr>
<th>Quantity of Animal Control Officers</th>
<th>Total Cost</th>
<th>Total Individual Benefit</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td>1</td>
<td>20,000</td>
<td>40</td>
</tr>
<tr>
<td>2</td>
<td>40,000</td>
<td>70</td>
</tr>
<tr>
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<td>60,000</td>
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</tr>
<tr>
<td>4</td>
<td>80,000</td>
<td>100</td>
</tr>
<tr>
<td>5</td>
<td>100,000</td>
<td>105</td>
</tr>
</tbody>
</table>

47. (Table: Total Cost and Total Individual Benefit) The table shows the total cost and total individual benefit of animal control for residents of a small town. If the 1000 residents act together, how many officers would they hire?
   A) 3
   B) 5
   C) 1
   D) 0

48. (Table: Total Cost and Total Individual Benefit) The table shows the total cost and total individual benefit of animal control for residents of a small town. If there are 1,000 residents, what is the marginal social benefit of the fourth animal control officer?
   A) $10,000
   B) $90,000
   C) $9,000
   D) $10

49. (Table: Total Cost and Total Individual Benefit) The table shows the total cost and total individual benefit of animal control for residents of a small town. If an individual resident were to decide about hiring and paying for animal control officers on his or her own, how many officers would that resident hire?
   A) 1
   B) 5
   C) 0
   D) 3
50. (Table: Total Cost and Total Individual Benefit) The table shows the total cost and total individual benefit of animal control for residents of a small town. If there are 1,000 residents, what is the total social benefit of three animal control officers?
   A) $9,000  
   B) $90,000  
   C) $10  
   D) $10,000

51. A model (theory) must have at least two assumptions.
   A) True  
   B) False

52. The government set an effective price ceiling on rent for NYC apartments, causing a shortage. This is an example of a market failure.
   A) True  
   B) False

53. Since pollution negatively affects people (reduces utility and/or increases production costs), the efficient amount of pollution is zero.
   A) True  
   B) False

54. Assume you live in Boulder and like to ski. If Eldora Ski area (20 miles from Boulder) deteriorates in quality (one of their ski lifts breaks) your demand curve for trips to Winter Park Ski area (70 miles from Boulder) will likely
   A) Who knows.  
   B) Stay the same or shift to the right  
   C) Stay the same or shift to the left  
   D) Not shift

55. Assume that the production of good x initially involves external costs. The government then taxes all of the firms in this industry such that these external costs are internalized (paid by the firms). One would expect the price of product x to
   A) rise and industry output to decrease, and this is efficient because less of x is produced and consumed  
   B) rise and industry output to decrease, and this is inefficient because less of x is produced and consumed
56. If a society is producing on their PPF, then allocations are necessarily efficient.
   A) True
   B) False

57. If we want to see how attendance at recitation will respond to a change in the difficulty level of the lectures, we should measure ____ , which is _____.
   A) The lecture-difficulty elasticity of recitation's attendance; the percentage change in recitation attendance divided by the percentage change in lecture difficulty.
   B) The lecture-difficulty elasticity of recitation's attendance; the percentage change in lecture difficulty divided by percentage change in recitation attendance.
   C) The recitation-attendance elasticity of lecture difficulty; the percentage change in recitation attendance divided by the percentage change in lecture difficulty.
   D) The recitation-attendance elasticity of lecture difficulty; the percentage change in lecture difficulty divided by the percentage change in recitation attendance.

58. In the case of a negative externality from consumption, an individual chooses to consume too much from society's point of view.
   A) True
   B) False

59. Figure: MB and MC of the Tobacco Industry

This graph represents the tobacco industry, in which the firm's optimal choice is different from the socially optimal choice. Which of the following could be a possible method for the market to reach the socially efficient point?
   A) Government impose a $0.20 tax must on each unit of production.
   B) Issue 35 tradable emissions permits.
   C) There is no need for government intervention. The market equilibrium point is already the socially efficient point.
   D) Give every firm a permission to produce 42 unit of tobacco.
Use the following to answer question 60:

**Figure: City with Two Polluters**

60. (Figure: City with Two Polluters) If the government wants to limit total pollution to 2,200 tons, it could impose an emissions tax of ________ on both firms.
   A) $200
   B) $300
   C) $400
   D) $100

61. When the allocation of resources and the distribution of goods is efficient, it is still often possible to make some members of society better off.
   A) True
   B) False

62. Regardless of whether or not they pay for them, people cannot be excluded from receiving the benefits of:
   A) public goods and common resources.
   B) common resources.
   C) private goods.
   D) public goods.
63. There are three bundles: A, B, and C. I strictly prefer C to A, I strictly prefer B to A, and am indifferent between C and B. Is this ranking of bundles consistent with rationality in the economic sense of the term?
   A) No
   B) Not enough information to tell
   C) Yes

64. The market will fail in the allocation of a common-property resource that is not scarce.
   A) True
   B) False

65. Santa Claus on Christmas Eve is
   A) A good example of a public commodity because his time is not rivalrous.
   B) Not a public commodity because his services on Christmas Eve are not congestible.
   C) Not a public commodity because his services on Christmas Eve are excludable
   D) A good example of a public commodity because his time is not congestible.

66. An individual's MRS_{xy} is how much how much x he would give up to get another unit of y, and a firm's MRTS_{lk} is how much less capital the firm would need to use, holding output constant, if it increased its use of labor by 1 unit.
   A) True
   B) False

67. Low-skilled workers, most poor, likely want to work more than they can at their equilibrium wage.
   A) True
   B) False

68. Imagine a world where everyone has to pay for their own medical care. Suppose that smoking cigarettes creates no negative or positive external effects, but, as is well known, causes a lot of smokers to get lung cancer. If the government does not interfere in the cigarette market, then________.
   A) The market equilibrium quantity of cigarettes smoked will be greater than the socially efficient number.
   B) There is not enough information to answer the question.
   C) The market equilibrium quantity of cigarettes smoked will be the efficient number from society's perspective.
   D) The market equilibrium quantity of cigarettes smoked will be less than the socially efficient number.
69. Market failures are things that are inherent to the market that cause the market allocation to be inefficient
   A) True
   B) False

70. Consider a utility possibilities frontier. Imagine a society must choose between one specific efficient allocation and one specific inefficient allocation. The society will always choose the efficient allocation.
   A) True
   B) False

71. Trades can be involuntary transactions
   A) True
   B) False

72. Within a firm, inputs are not allocated by markets.
   A) True
   B) False

73. Karen consumes gasoline and other goods. A new excise tax on gasoline raises gas prices. However, the government pays Karen an income subsidy that is just enough for her to stay on her original (pre-tax) indifference curve. Her new optimal consumption bundle will have:
   A) This question can't be answered, since some essential information (such as Karen's income, the pre- and post-tax prices of gas, etc.) is missing.
   B) the same amount of both goods as before.
   C) less gas and more of other goods.
   D) less of other goods and more gas.

74. Which of the following is an environmental policy based on tradable pollution permits?
   A) paying automobile drivers 10 cents for each 10% reduction in automobile emissions
   B) allowing automobile drivers to buy and sell the right to a certain level of automobile emissions
   C) ignoring pollution and letting private markets operate without government interference
   D) a charge to automobile drivers of 10 cents for 100 units of pollutants emitted
75. If the price of gasoline rises and stays high for an extended period of time, we expect people to:
   A) reduce the number of miles they drive, buy smaller and more gas efficient cars, and use more public transportation.
   B) use more public transportation.
   C) reduce the number of miles they drive.
   D) buy smaller and more fuel-efficient cars.

76. An individual's weight elasticity of candy consumption is (choose the answer that is both correct and most complete)
   A) the percentage change in their candy consumption divided by the percentage change in their weight. It is a measure of how much their weight will be affected by an increase in candy consumption.
   B) the percentage change in their weight divided by the percentage change in their candy consumption. It is a measure of how much their weight will be affected by an increase in candy consumption.
   C) the percentage change in their weight divided by the percentage change in their candy consumption. It is a measure of how much their candy consumption will be affected by an increase in their weight.
   D) the percentage change in their candy consumption divided by the percentage change in their weight. It is a measure of how much their candy consumption would be affected by an increase in their weight.

77. I care about only two things: scotch and Swiss chocolate bars. Consider my utility function and indifference curves. My utility function looks like the crater of a volcano: my indifference curves are circles and the quantities of both commodities are positive at the bottom of the crater. Which of the following statements is both correct and most informative?
   A) Scotch is initially a good but then becomes a bad
   B) Scotch is initially a bad but then becomes a good.
   C) Scotch and chocolate are both bads
   D) Chocolate is a bad

78. For a market commodity _____ is exogenous and quantity is ____. For a nonmarket commodity _____ is exogenous and _____ is endogenous. (choose the best fill-ins)
   A) price, exogenous, price, quantity
   B) price, endogenous, price, value
   C) price, endogenous, quantity, price
   D) price, endogenous, quantity, value
79. A fish stock that lives in the ocean in international waters (outside the control of any government) is a public good because everyone can, if they want, harvest from the stock without constraint—the resources is available to the public for free.
   A) True
   B) False

80. Goods are redistributed between George and Fred such that after the redistribution Fred is better off and George is worse off. Given this, we know that before the redistribution, the distribution of goods between Fred and George was efficient.
   A) True
   B) False

81. I have a ton of old newspapers in my home office. I like them there; Sally, my wife, does not. The current situation is efficient because? Choose the best possible answer.
   A) Sally's WTP for their removal is less than my WTA their removal.
   B) Sally's WTP for their removal is more than my WTP to keep them around.
   C) It is not right for me to clutter up our home with yellowing newspapers.
   D) Sally's WTP for their removal is more than my WTA their removal.

82. A plastics manufacturing plant emits pollution into the Big River. This leads to higher costs and disruption for fisherman on the lake, for which they are not compensated. In this situation, we can assume that:
   A) the ideal amount of society's resources is being used to produce plastic.
   B) there is an external benefit to society from plastic production.
   C) too many of society's resources are being used to produce plastic.
   D) too few of society's resources are being used to produce plastic.

83. The presence of an external negative effect implies the market is failing.
   A) True
   B) False

84. The MRT (marginal rate of transformation) is the slope of a (an) ___.
   A) Isoquant.
   B) Utility Possibility Frontier.
   C) Indifference curve.
   D) Production Possibility Frontier.
85. Ignoring the cost of producing another unit of a public commodity, everyone in society necessarily benefits when the supply of a public commodity increases by one unit
   A) True
   B) False

86. A necessary condition for successful Coasian bargaining is property rights are well defined for the scarce resources in question
   A) True
   B) False

87. George has many tattoos on his body that the public find offensive. George also likes walking around without much clothing on. This leads to a situation where George is displaying more tattoos than is socially efficient. Which of the following would be a Coasian solution to the problem?
   A) A law forbidding George from displaying tattoos.
   B) A law clarifying property rights, that says that George cannot have tattoos showing unless everyone is OK with it. In this case, society could end up with the socially optimal amount of tattoos on George because George has an incentive to bribe people so he can go naked.
   C) A tax on the number of tattoos that George displays.
   D) None of the above.

88. Which of the following is an example of scarcity
   A) If a city uses an acre of land to build a park there will be less land available for houses.
   B) If I buy a new house I won't have enough money to go on vacation.
   C) You choose to stay home and study instead of going to the movies.
   D) All of these things.

89. Both Fred and George can buy as many Cuban cigars as they want at $5 a cigar. George buys 8/day, Fred, 3/day. George's consumer's surplus from cigar consumption
   A) equals Fred's because they both pay $5/cigar.
   B) is larger than Fred's consumer's surplus from cigar consumption.
   C) is smaller than Fred's consumer's surplus from cigar consumption.
   D) might be smaller than Fred's consumer's surplus from cigar consumption.

90. Unregulated competitive markets evolved to increase efficiency, not equity.
   A) True
   B) False
91. Both competitive firms and monopolists face constraints from the market. A competitive firm is constrained by ______ and a monopolist is constrained by ________.
A) the market demand curve; the market demand curve
B) price; the market demand curve
C) the market demand curve; price
D) price; price

92. The marginal product of labor is:
A) the slope of the total product of labor curve.
B) the change in average product divided by the change in the quantity of labor.
C) the change in output that occurs when capital increases by one unit.
D) the change in labor divided by the change in total product.

93. Assume that there are only 2 commodities in this economy. If these two commodities are both bads, a consumer in this economy can achieve a maximum level of utility when ________.
A) he or she consumes nothing.
B) he or she chooses a consumption bundle that maximizes the amount of each commodity.
C) he or she consumes a bundle consisting of just one of the commodities.
D) None of the above.

94. Suppose an emissions tax is imposed on all dairy farms in Wisconsin. This tax would have the effect of:
A) increasing the level of emissions.
B) reducing the supply of milk in Wisconsin.
C) increasing the supply of milk in Wisconsin.
D) encouraging the dairy farmers to lower prices.

95. Which statement is both correct and most informative
A) Prices are too high
B) Prices are signals that coordinate production and consumption.
C) Prices are signals that always push consumers and producers toward efficiency
96. Suppose Un's rubber factory belches black smoke in the air during the production process. If the government forces the plant to internalize this external cost with a pollution tax, then we would expect
   A) The social marginal cost of Un producing rubber will increase
   B) The firm's supply curve for rubber will shift to the right
   C) The demand curve for rubber will shift to the left because the price of rubber will rise
   D) The private marginal cost of Un producing rubber will increase

97. Bluefin tuna travel in schools throughout the world's oceans. Fishing boats from many nations harvest bluefin tuna as the schools migrate through their national waters. The schools of bluefin tuna are best described as:
   A) a common resource.
   B) a private good.
   C) a public good.
   D) an artificially scarce resource.

98. If an individual's consumption of a good directly affects others, the individual will always consume either too much or too little of the good from a social efficiency perspective.
   A) True
   B) False

99. I care about only two things: scotch and Swiss chocolate bars. Consider my utility function and indifference curves. My utility function looks like a mountain such that my indifference curves are circles and the quantities of both commodities are positive at the top of the mountain. Which of the following statements is both correct and most informative?
   A) Chocolate starts off as a good and then becomes a bad
   B) Scotch is initially a bad but then becomes a good.
   C) Chocolate is initially a bad but then becomes a good
   D) Scotch and chocolate are both bads

100. The fact that children starve in market economies proves that the market can fail
   A) True
   B) False
George sneaks up behind Mabel and kisses her, making himself better off and Mabel worse off. If he had to, George would have paid $50 for the opportunity to sneak up and kiss Mabel. Mabel hates George but would have let him kiss her for $75. The kiss is

A) Not enough information to tell whether the kiss is efficiency increasing or decreasing.
B) Efficiency increasing
C) Efficiency decreasing
Answer Key

1. B
2. B
3. C
4. C
5. B
6. B
7. A
8. B
9. D
10. B
11. A
12. C
13. A
14. C
15. C
16. A
17. B
18. A
19. A
20. B
21. B
22. B
23. A
24. D
25. C
26. B
27. A
28. D
29. B
30. B
31. A
32. A
33. B
34. C
35. B
36. A
37. B
38. A
39. A
40. A
41. A
42. A
43. B
44. D
45. B
46. C
47. A
48. A
49. C
50. B
51. A
52. B
53. B
54. B
55. A
56. B
57. A
58. A
59. B
60. B
61. A
62. A
63. C
64. B
65. C
66. B
67. B
68. C
69. A
70. B
71. B
72. A
73. C
74. B
75. A
76. D
77. B
78. C
79. B
80. B
81. A
82. C
83. B
84. D
85. B
86. A
87. B
88. D
89. D
90. A