

Final Econ 2010 (Morey): Fall 2014 Version 1.
This exam has 71 questions.

Comments added Dec 16, 2014

1. Which of the following goods best fit the characteristics of a private good?
 - A) fire protection
 - B) a professor giving a lecture in a large classroom
 - C) disease prevention
 - D) an ice-cream cone

2. (modification of question from last final) Assume a world of only two commodities: adult diapers and Hostess Twinkies. These two commodities are produced using only two inputs: labor and plastic. Assume, you know society's stock of labor and plastic, society's production possibilities frontier and the production function for adult diapers. Given all this, do you have sufficient information to determine the production function for Twinkies? (Choose the answer that is both correct and most informative.)
 - A) No because this information is necessary, but not sufficient, to derive the production function for Twinkies.
 - B) No
 - C) Yes

If you know the PPF and the production function for one of two goods, the amount of the other good that can be produced from different amounts of the remaining amounts of the two inputs is what is left.

3. (Phillip) Picture the indifference curve for carrots, a good, and candy, a bad. If quantity of candy is placed on the horizontal axis and quantity of carrots are placed on the vertical axis which statement best describes the shape of each indifference curve, given that consuming another unit of carrots (candy) always increases (decreases) utility by the same amount. (Choose the answer that is both correct and most informative.)
 - A) a negative-sloping line
 - B) a straight, positive-sloping line
 - C) a straight, negative-sloping line
 - D) a positive-sloping line
 - E) none of the above

If one commodity is a good and the other is a bad the indifference curve must be positively sloped. The issue is whether it is a straight line, or not. Note the assumption in the question about how much utility changes when either commodity changes levels.

4. (Owen) The market demand for sleigh rides is $P=50-5Q$. The market supply for sleigh rides is $P=10Q+5$. Assume the market for sleigh rides acts in a perfectly competitive manner. The consumer surplus is _____.
- A) 60
 - B) 22.5
 - C) Not enough information to determine.
 - D) 45
5. Economic situations that are in equilibrium are _____ efficient. (Choose the answer that is both correct and most informative.)
- A) Never
 - B) Almost
 - C) Always
 - D) Sometimes
6. (question from last final) Consider commodity X and consider the marginal social benefit curve for the consumption of Commodity X (units consumed on the horizontal axis and marginal social benefits on the vertical axis). Which of the following statements is both correct and most informative?
- A) If X is a public good, the marginal social benefit curve is the horizontal summation of every individual's marginal private benefit curve.
 - B) More than one of the other answers is correct.
 - C) If X is a public good, the marginal social benefit curve is the vertical summation of every individual's marginal private benefit curve.
 - D) If X is a congestible good, the marginal private benefit curve and marginal social benefit curve for X are **always** one and the same.
7. Which statement best describes how goods and services are distributed in a competitive market economy in equilibrium
- A) The more resources one owns/controls, the more of the goods-and-services pie one consumes
 - B) Those who work hardest consume the most stuff.
 - C) Who gets what depends on property rights
 - D) They are be distributed equitably, everyone getting their fair share.
8. Making the allocation of society's resources less efficient can increase the welfare of society.
- A) True
 - B) False
- The important words are “can” and “welfare.” If the current allocation is highly unfair, society might prefer a less efficient but fairer allocation.

9. (Libby) Assume everyone attending Professor Morey's Microeconomics class is part of society. You like to sit in the front row and use Twitter during class. The person next to you enjoys looking at your crazy tweets about the class (the items that you post on Twitter) but the guy sitting behind you is annoyed. No one else cares, including Professor Morey. From society's perspective,
- A) There is not enough information to determine whether you are tweeting the efficient amount.
 - B) You are tweeting the efficient amount because the positive and negative external effects cancel each other out.

Your tweeting has both positive and negative external effects but we do not know their magnitudes so do not know if they cancel out. What is the guy in the back would have to be paid \$5 to put up with your tweeting, but the guy next to you, while he enjoys your tweets, would only pay \$1 to see them.

10. If the price of a Lady Gaga concert ticket in Boulder is \$100 per seat, the ticket office can sell 10,000 tickets. If the price of a ticket is \$150 per seat, they can sell 6,000 tickets. Which of the following statements is true?
- A) The demand for this ticket is price inelastic, so an increase in the price of the ticket will decrease the total revenue of the ticket seller.
 - B) The demand for this ticket is price inelastic, so an increase in the price of the ticket will increase the total revenue of the ticket seller.
 - C) The demand for this ticket is elastic, so an increase in the price of the ticket will increase the total revenue of the ticket seller.
 - D) The demand for this ticket is price elastic, so an increase in the price of the ticket will decrease the total revenue of the ticket seller.
11. (Libby) If property-rights are non-enforceable ____ (Choose the answer that is both correct and most informative.)
- A) Market transactions will not occur.
 - B) The market outcome will be inefficient.
12. Bluefin tuna travel in schools throughout the world's oceans. Fishing boats from many nations harvest Bluefin tuna as the schools migrate through international waters. The schools of Bluefin tuna are best described as:
- A) a public good.
 - B) a common-property resource.
 - C) a private good.
 - D) an artificially scarce resource.

13. If Maria's consumption of eggnog increases from .75 quarts an hour to 1.25 quarts per hour, her frequency of barfing (throwing up) will increase from 4.5 to 5.5 times an hour. Her eggnog elasticity of barfing (her (EEB) is
- A) 2.5
 - B) -2.5
 - C) -.4
 - D) .4
14. How many of the following statements are correct? "(1) In a competitive market economy, everyone faces the same exogenous prices for goods, and (2) if there are no external effects, the relative prices of two goods reflect how much less of the one can be produced if society produces one more unit of the other, (3) in equilibrium everyone has the same marginal rates of substitution. And (4), given (1)-(3) everyone is **necessarily** consuming the same bundle of goods.
- A) The first three statements are correct, but (4) is incorrect.
 - B) Only assertions (1) and (2) are correct.
 - C) All four assertions are correct.
 - D) Only assertion (1) is correct
15. Assume that everyone living in Boulder or Aspen have the same income and the same preferences. It costs Boulder residents more per day to ski at Aspen than it costs Aspen residents. Given the current prices, everyone living in Aspen or Boulder skis Aspen at least one day a year. Aspen residents will **necessarily** get more consumer's surplus from skiing Aspen than will residents of Boulder?
- A) False
 - B) Not enough information to determine whether Aspen residents will get more consumer's surplus from skiing Aspen.
 - C) **True**

If people have the same income and the same preferences they have the same demand curves; that is they have the same WTP curves (the demand curve with \$ on the vertical axis). The question is about the area under this curve above the cost of an Aspen ski trip. The cost is higher for Boulder residents, so Aspen residents will get more CS.

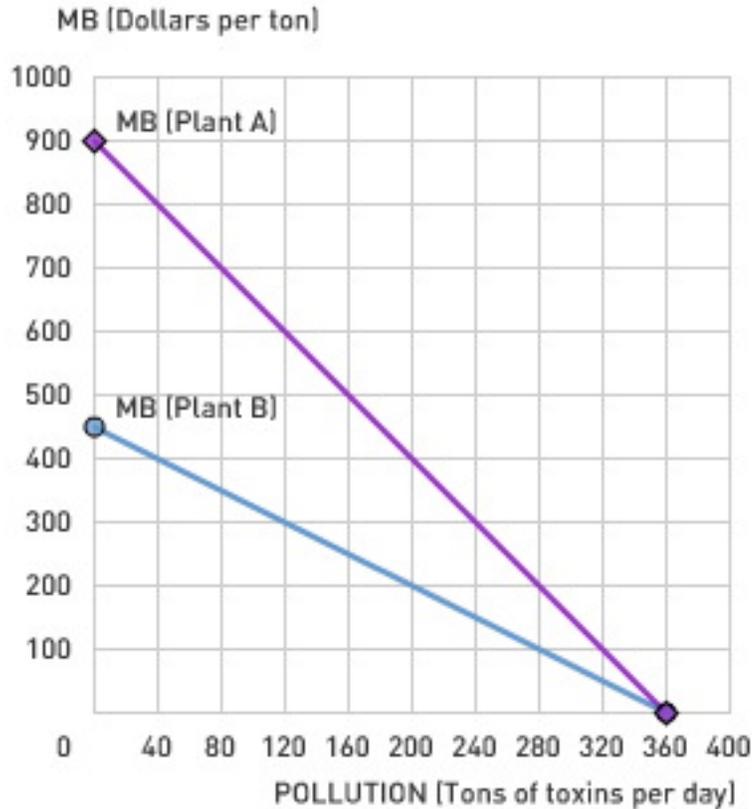
16. Society consists of Bubba, Molly and a bunch of **other people**. Bubba owns a gun and Molly owns a copy of "Fifty Shades of Grey." They trade making both of them better off. Which of the following statements is both necessarily correct and most informative?
- A) The trade might be efficiency increasing, we don't know for sure.
 - B) After the trade the allocation of goods is efficient
 - C) The trade is efficiency increasing because they are both better off.

The trade makes both Bubba and Molly better off. If it had no negative effects on anyone else we would know that the trade was efficiency increasing, but we do not know that. Maybe Molly with a gun, or Bubba with the box, would wreak havoc on other people, a lot of havoc.

17. (Aplia question) Suppose that a steel manufacturing plant in Chicago dumps toxic waste into a nearby river, creating a negative externality for those living downstream from the plant. Producing an additional ton of steel imposes a constant marginal external cost of \$225 regardless of the level of production. There is no marginal external benefit from steel productions, so the marginal benefit to consumers equals the marginal social benefit. The market price for steel \$930. To create an incentive for the firm to produce the socially optimal quantity of steel, the government could _____ of _____ per ton of steel.
- A) impose a tax; \$225
 - B) impose a tax; \$930
 - C) grant a subsidy; \$930
 - D) grant a subsidy; \$225
18. When individuals take external costs and benefits into account:
- A) the market will not reach an efficient solution.
 - B) there are no external costs.
 - C) they internalize the externality.
 - D) the government needs to intervene in the market.
19. (Zach) Ralph takes 8 hours to build a shelter and 3 hours to hunt a pig. Jack takes 5 hours to build a shelter and 2 hours to hunt a pig.
- A) Jack has a comparative advantage in building shelters
 - B) Jack has a comparative advantage in hunting pigs.
 - C) Ralph has an absolute advantage in hunting pigs.
 - D) Ralph has an absolute advantage in building shelters
20. Imagine a society of two individuals (Colin, the cowboy and Sofia, the New Yorker) and two commodities: operas CDs and barbecued steaks. For Sofia both are goods, but for Colin steaks are a bad. Further assume a manna-from-heaven model (no production). Assume we have correctly drawn their UPF. The allocation of steaks and opera CDs is efficient. Given all this, it must be the case that Sofia is eating all of the steaks.
- A) False
 - B) True

Colin giving steaks to Sofia makes both of them better off. So efficiency is not achieved until Sofia is eating all of the steaks.

21. (modification of question from last final) Considering texting while driving and assume texting while driving imposes cost on other drivers and on pedestrians. The efficient amount of texting while driving is
- A) necessarily zero.
 - B) possibly zero.
22. (modification of Aplia question) Suppose there are two chemical plants that produce kitchen and bathroom cleaners. Through the production process, the plants release toxins into the ocean, polluting the water and killing marine life nearby. The following graphs show that the marginal cost curve for reducing pollution (pollution abatement) for Plant A lies above the one for Plant B. (Aplia calls these curves MB curves because polluting more benefits the each plant (they save money). For example, if Plant B pollutes 360 rather than 359 units they say almost nothing, but if Plant B pollute 1 unit rather than zero units, they save approximately \$900. Without government intervention, each plant will choose to emit 360 tons of toxins per day.



Suppose that the government decides to impose environmental standards, but knows that having the plants reduce emissions by the same amount is not efficient. Instead, overall social benefits can be increased by having plant B reduce its pollution _____ than Plant A reduces its pollution

- A) More
- B) less

23. Consider a world of only two perfectly divisible goods: anchovies and onions. Currently, Willy's marginal utility from anchovies is greater than his is marginal utility from onions. And, anchovies cost more than onions. Willy should :
- A) There is not enough information provided to determine what he should do
 - B) Buy more onions and less anchovies
 - C) Definitely buy more onions but there is not enough information to to determine whether he should buy less anchovies.
 - D) Buy more anchovies and less onions
24. You donate to a food bank because it makes you feel good/better off. Those who get food from the food bank are better off because of your donation. Assuming no one else is affected, before your donation there was inefficiency.
- A) True
 - B) False
25. The market will fail in the allocation of a resource that is congestible and common property, but not scarce.
- A) There is not enough information to answer the question
 - B) Yes, it will fail.
 - C) No, it will not fail
26. (Aplia question) A group of university students buys coconuts from a farmers' market. The students consume the meat of the coconuts for food and use the shells to make sculptures. These sculptures are placed in a public park that any student can visit. The park sustains itself through students' donations. Some individuals have no incentive to donate to the park and will, instead, depend on those who do donate. Which of the following is this an example of?
- A) A negative externality
 - B) overuse of coconuts
 - C) Socially efficient allocation of coconuts
 - D) the free-rider problem

27. (Edward Aplia question with no changes) Boulder Colorado, wants to reduce its emissions of Guber gas by 10 units. Two firms in town emit Guber gas. For Firm 1 they can always decrease their emission of GG by one unit at a cost of \$5. In contrast, for Firm 2 it costs \$1 to eliminate the first unit, \$3 to eliminate the second unit, \$6 for the third unit, \$10 for the 4th unit, \$15 for the fifth unit, etc. The cost-minimizing way to reduce these ten units is _____, and the total cost will be _____. If each firm reduces 5 units the total cost of the 10-unit reduction will be _____.
- A) For Firm 1 to reduce 10 units; \$50; \$60
 B) For Firm 2 to reduce two units and Firm 1 to reduce 8 units: \$65; \$60
 C) For each firm to reduce five units: \$65; \$65
 D) For Firm 2 to reduce two units and Firm 1 to reduce 8 units; \$44; \$60
28. In the market place the aggregate demand curve for gubers is $G_d=10-2P$ and the aggregate supply curve is $G_s=5+P$ where P is the price of a guber. The equilibrium price of a guber is _____.
- A) neither of the other two answers
 B) $5/3$
 C) 6 and $2/3$
29. To produce X widgets a firm **must** choose an input combination that is on the isoquant for X widgets.
- A) False
 B) True
30. (modification of Sam) After a hot dog is put in a bun, adding more hot dogs to the same bun has no effect on Bob's utility. And, after surrounding a hot dog with a bun, adding more buns to the meal does not increase Bob's utility. But, Bob's utility is increasing in the number of bunned hot-dogs that he eats. What do Bob's indifference curves look like (with buns on the vertical axis and hot dogs on the horizontal axis)?
- A) Each indifference curve is a vertical line.
 B) not enough information to tell
 C) Each indifference curve looks like the letter "L"
 D) Each indifference curve is a downward-sloping straight line.
31. (modification of question) A rational consumer will always choose to consume a bundle of goods that is on her budget line.
- A) No
 B) Yes
- The critical word here is “goods” meaning that for both commodities more is always preferred to less. In which case, if one is not spending all of their money, they can increase their utility by spending more of it.

32. (flip of question on last final) Assume that one can only consume what he or she personally buys (no gifting). In competitive market equilibrium, there could be people who are consuming Diet Coke that have a lower WTP for Diet Coke than some of the people who are not consuming it. (Choose the answer that is both correct and most informative.)

- A) True
- B) False
- C) True, but unlikely

This situation cannot happen. If I have a Diet Coke and you do not, and my WTP to drink it is lower than yours, this cannot be competitive market equilibrium because you buying the Diet Coke from me can make both of us better off.

33. **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

34. Julia, a student in class, correctly pointed out that in terms of delivering presents on Christmas Eve, Santa is an artificially-scarce good.

- A) The statement is false. In addition, I am not sure her name is Julia.
- B) The statement is true but I am not sure her name is Julia

35. (modified Aplia) Santa Claus is a mythical creature that delivers presents to children on Christmas Eve, but only to children who believe in him, have been good, and celebrate Christmas) Santa Claus on Christmas Eve is

- A) Not a public commodity because his services on Christmas Eve are congestible.
- B) A good example of a public commodity because his time is 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 rivalrous.

36. It is sometimes possible for two people to consume the same unit of the same good.

- A) False
- B) True

This is the definition of non-congestible (non-rivalrous). It is a property of all public goods and all artificially scarce goods. If you got this wrong, you don't really understand what non-congestible means.

37. (variation on question on second midterm) Suppose Alice consumes only wine and cheese. Alice's income increases, the price of wine decreases, and the price of cheese decreases. Consider Alice's budget line with cheese on the vertical axis and wine on the horizontal axis. What will happen to the slope of Alice's budget line?
- A) It becomes flatter.
 - B) There is not enough information to tell.
 - C) It becomes steeper.
 - D) It necessarily remains the same.

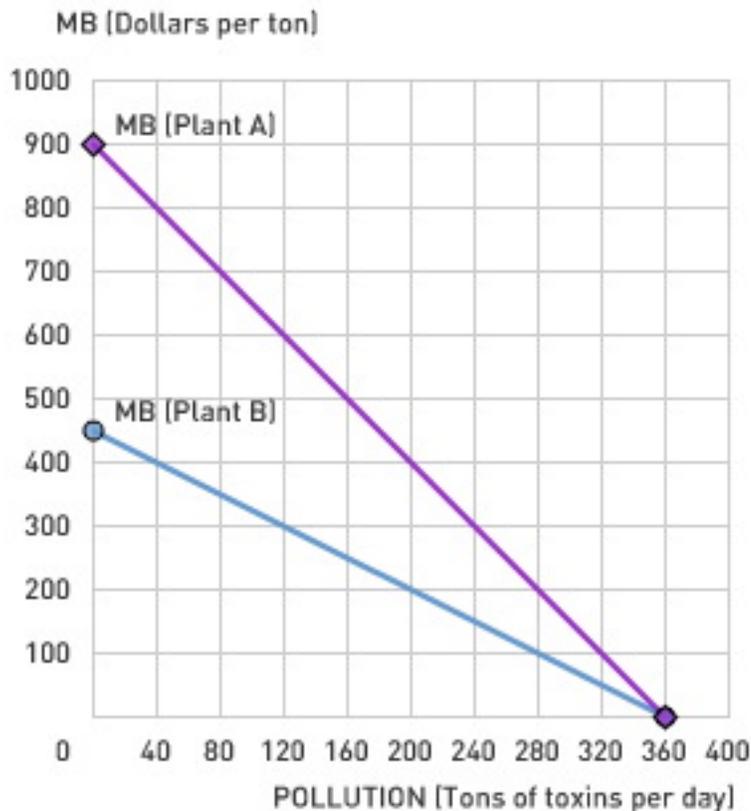
Changing income has no effect on the slope. If cheese is on the vertical axis then lowering the price cheese makes the budget line steeper. But if wine decreases in price the budget line becomes flatter. So, unless we know the exact changes we don't know whether the budget line ends up steeper or flatter.

38. 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
39. On the last midterm, **some of you** indicated that you "miss a lot of lectures and recitations." If you are **not** in that category answer "I am not in that category" For those of you who answered on the last exam, "I miss a lot of lectures and recitations." please choose the answer that **best** explains why. (If you answer this question you will get full credit, not matter how you answer it.)
- A) I am **not** in that category; I do not miss a lot of classes.
 - B) It is nothing special about this class, I miss a lot of all my classes.
 - C) It is something special about this class--the don't like the topic, microeconomics
 - D) I do not need to attend lectures because all of the materials I need are online.
 - E) It is something special about this class--I don't like the way the material is presented
40. Consider a world with only two commodities: beer and cigarettes. For Wilma, beer is a good, but for Wilma cigarettes start off as a bad but eventually turns into a good. Consider Wilma's indifference curves with cigarettes on the horizontal axis and beer on the vertical axis Which statement is both correct and most informative?
- A) Her indifference curves are shaped like an inverted U (increasing beer consumption from zero, first the slope is positive but then switches to negative)
 - B) Her indifference curves are U-shaped (increasing beer consumption from zero, first the slope is negative but then switches to positive)
 - C) Her indifference curves are all upward sloping
 - D) Her indifference curves are all downward sloping.

41. Which of the following is the best example of a non-excludable good?

- A) ice cream
- B) Education
- C) health care
- D) national defense

42. (modification of Aplia question) Suppose there are two chemical plants that produce kitchen and bathroom cleaners. Through the production process, the plants release toxins into the ocean, polluting the water and killing marine life nearby. The following graphs show that the marginal cost curve for reducing pollution (pollution abatement) for Plant A lies above the one for Plant B. (Aplia calls these curves MB curves because polluting more benefits the each plant (they save money). For example, if Plant B pollutes 360 rather than 359 units they save almost nothing, but if Plant B pollute 1 unit rather than zero units, they save approximately \$900. Without government intervention, **each plant will choose to emit 360 tons of toxins per day**. Assume the marginal **damages** to society from the pollution is a constant \$200 a ton.



An efficient solution is

- A) Both of the numerical answers are correct.
- B) Neither of the numerical answers is correct.
- C) 200 tons of toxins released by Plant B and 280 tons of toxins released by Plant A, achieved with a toxic-release tax of \$200 per ton.
- D) 200 tons of toxins released by Plant B and 280 tons of toxins released by Plant A, achieve by a tradable permit system with 480 permits, each permit good for the release of one ton of toxins.

If the external damage is \$200 a ton and one wanted to correctly the inefficiency with a tax, the tax should be \$200/ton. At a tax of \$200 Plant B will choose to pollute 200 tons (reduce their pollution by 160 tons from 360 to 200) and Plant A will choose to pollute 280 tons (reduce their pollution by 80 tons from 360 to 280).

So when efficiency is achieved there are 480 tons of pollution left. So, if one used a

pollution-permit system instead of a tax, the government would issue 480 permits. The equilibrium price of a permit would be \$200, Plant B would hold 200 permits and Plant A would hold 280 permits.

43. Flu vaccines often provide both private benefits to individuals and positive external benefits to other members of society. As a result, without government intervention one would find:
- A) a shortage of flu vaccines.
 - B) too many flu vaccines being produced since external benefits would not be considered.
 - C) too few flu vaccines being produced since external benefits would not be considered.
 - D) the optimal amount of flu vaccines would be produced since external benefits would not be considered.
44. (Zach) If people get a flu vaccination so they do not get the flu, and if spreading the flu to someone else is bad, then getting a flu vaccination produces
- A) can produce negative external effects because the vaccination makes some people who get one sick
 - B) negative external effects because the resources used to produce and administer the vaccines might have been used to produce something society values more.
 - C) positive external effects
45. (Asked on second midterm) Suppose Alice consumes only wine and cheese. Alice's income increases, the price of wine decreases, and the price of cheese increases. Consider Alice's budget line with cheese on the vertical axis and wine on the horizontal axis. What will happen to the slope of Alice's budget line?
- A) It becomes steeper.
 - B) It becomes flatter.
 - C) There is not enough information to tell.
 - D) It necessarily remains the same.
46. Because Americans eat a lot of meat, and because meat production uses more resources to produce protein than other types of food, food production in the U.S. is inefficient.
- A) True
 - B) False

47. George is a competitive firm making candies. Inputs are chocolate, c , and sugar, s . The constant $MRTS_{cs}=3/4$. George will use both chocolate and sugar to produce his candies. (To help your answer the question sketch a representative isoquant and isocost line.)
- A) Unlikely
 - B) Likely
- I keep asking this question because people keep getting it wrong. If the slope of the isoquant is a constant, the isoquant is a straight line. In that case, the firm will most likely only use one input.
48. Before the first midterm we did an experiment where we divided the class into two groups. Which group were you in? (If you answer this question you it will be marked correct, no matter how you answer.)
- A) I was not in class the day of the experiment.
 - B) I was in the group that stayed in our classroom and took the first midterm from last year.
 - C) I was in a group that went to another classroom with Zach or Akhil and reviewed the first midterm from last year .
49. Suppose an emissions tax is imposed on all dairy farms in Wisconsin. This tax would have the effect of:
- A) reducing the supply of milk in Wisconsin.
 - B) increasing the supply of milk in Wisconsin.
 - C) increasing the level of emissions.
 - D) encouraging the dairy farmers to lower prices.
50. (Libby) A Netflix program is
- A) a good that is non-congestible but excludable
 - B) two of the other answers are correct
 - C) an artificially-scare good
 - D) a public good because it is non-congestible (everyone can watch the same show at the same time)

51. Assume for the purposes of this question, that people in Argentina have the same preference as people in the U.S. Also assume the same state of technical knowledge in both countries. For the purpose of this question also assume a meal is a meal; that is the objective is to eat calories; what one eats is secondary. We observe that the production of meals in Argentina uses relatively more meat than the production of meals in the U.S. In the U.S. relatively more labor is used to produce meals. Which explanation is most correct and most explanatory?
- A) In the U.S. the price of meat relative to the price of labor is higher than it is in the Argentina.
 - B) With meat on the vertical axis and labor on the horizontal axis, since meat is relatively cheaper in Argentina, the isocost lines for meal production are steeper in Argentina because meat is relatively cheaper than it is in the U.S. (labor is relatively more expensive). This causes the cost-minimizing input combination for meal production to be more labor intensive in the U.S. (less meat intensive).
 - C) in Argentina the price of meat relative to the price of labor is higher than it is in the U.S.
 - D) relative input prices differ between the two counties.
52. In the threesome discussed in class -- John, Thelma, and Barbed Wire-- which of the following best describes, **in economic terms**, the situation before John arrived, before Barbed arrived, and after Barbed arrived.
- A) John was treated poorly by Thelma.
 - B) The farm while "owned" was effectively a public good/commodity, it was noncongestible. The arrival of John eliminated the public good aspect of the farm, but at a high cost. Barbed could eliminate the public good-problem more cheaply than could John.
 - C) The farm while "owned" was effectively a common-property resource from the perspective of cattle drives. John's arrival eliminated the CP problem, but at a high cost. Barbed could enforce the property right at a lower cost than could John.
 - D) The farm while "owned" was effectively a common-property resource from the perspective of cattle drives. John's arrival eliminated the CP problem, but at a high cost. John got dumped.

53. (modification) My dog Sofie's willingness-to-pay for french fries is as follows: she is willing to pay 12 dog biscuits for the first bag of fries, 25 dog biscuits for two bags, 32 biscuits for three bags, and 39 biscuits for four bags. I charge her 10 dog biscuits for each bag of french fries How many bags of french fries should Sofie purchase from me?
- A) 4
 - B) 1
 - C) 2
 - D) 3
- Sofie gets wtp for the first bag of fries is 12 DB, 13 DB for the second bag, 7 DB for the third bag, and 7 for the fourth bag. Sofie wants to buy only two bags: past that she would be paying more than she values them.

54. Markets for the right to pollute are:
- A) likely to result in fewer incentives to find and create technology that reduces pollution.
 - B) a means by which more pollution is encouraged.
 - C) created by government when it issues tradable pollution permits.
 - D) created by individual firms when they reduce pollution emissions.

55. (Libby question) Edward dislikes drinking hot cocoa. He hates drinking wine more. He lives in a world that only contains two items, wine and hot cocoa. Based on his above preferences, rank the following baskets.

Basket A= 3 cups of hot cocoa and 5 glasses of wine

Basket B= 1 cup of hot cocoa and 5 glasses of wine

Basket C= 1 cup of hot cocoa and 3 glasses of wine

Basket D= 3 cups of hot cocoa and 6 glasses of wine.

($A < B$ means basket B is preferred to basket A. $A = B$ means Edward is indifferent between baskets A and B)

- A) $B < A < D < C$
- B) $A = B < D < C$
- C) $C < A = B < D$
- D) $D < A < B < C$

56. (now on Aplia quiz) Bob's Brewery dumps waste into the Boulder Creek because it is the cheapest way for the brewery to dispose of the waste. The waste negatively impacts the residents in the area because they can no longer use the creek for recreation. Currently, there is no tax or regulation in place to limit Bob's waste disposal. Which of the following is both correct, and most informative?
- A) This is an example of a negative external effect and a negative externality.
 - B) This is an example of a negative externality.
 - C) This is an example of a negative external effect.
 - D) This is an example where the socially optimal level of pollution is occurring.
57. (modification of question on last final) Assuming the model (theory) of consumer behavior taught in class and in the book, and assuming only two commodities, both goods, increasing the price of one of the goods (holding income and the other price constant), will **necessarily** make the individual worse off.
- A) True
 - B) False
58. When the per-unit tax on pollution is zero, the profit-maximizing competitive firm emits 10 units of pollution. Then a pollution tax of \$5 a unit is imposed. The marginal cost of decreasing pollution is increasing and it will cost the firm \$8 to reduce its pollution from 10 to 9 units. The profit maximizing firm should keep should keep polluting the ten units of pollution and pay its pollution tax bill of \$50?
- A) False
 - B) **True**
 - C) It should keep polluting 10 units, but its pollution-tax bill is not \$50
- It would cost the firm \$8 to reduce its pollution from 10 to 9 units. If it does not reduce from 10 to 9 units, it has to pay a \$5 tax. Would you rather pay \$8 or \$5**
59. (directly off last midterm) Which of the following is both correct and most explanatory as an ending for the sentence? The cost of producing another unit of a public good ...
- A) is zero because once that unit is available for one individual it is there for everyone.
 - B) is typically positive but once another unit produced, the cost of supplying it to additional individuals is zero

60. (question taken off previous midterm.) Assume a world of only two goods, x and y, and assume x and y are perfect substitutes (the marginal rate of substitution between them is a constant). George has a positive income and no control over the prices of x and y. If the price of good y decreases, George will buy more of good y. (To help you answer the question, sketch a few of George's indifference curves and budget lines.)
- A) There is not enough information given to determine whether he will buy more of good y.
 - B) Definitely true
 - C) Definitely false
61. Public goods differ from common-property resources in that:
- A) both are excludable, but public goods are non-rivalrous in consumption, while common-property resources are rivalrous in consumption.
 - B) both are non-excludable, but public goods are non-rivalrous in consumption, while common-property resources are rivalrous in consumption.
 - C) both are rival in consumption, but public goods are non-excludable, while common-property resources are excludable.
 - D) both are non-rivalrous in consumption, but public goods are excludable, while common-property resources are non-excludable.
62. (off last midterm) Which of the following statements is both correct and most informative?
- A) Efficiency in production is a necessary condition for overall efficiency.
 - B) None of the other statements is correct
 - C) If there is **inefficiency** in production, there is not overall efficiency because society could increase the production of one or more goods without decreasing the production of other goods. And, if this happened the extra goods could be used to make someone better off without making anyone else worse off.
 - D) One can have overall efficiency without efficiency in production.
63. A competitive market system with no government intervention will provide an efficient amount of public goods
- A) False
 - B) True
64. Television programs distributed by satellite with encoded signals are public goods
- A) False
 - B) True

65. The fact that children starve in market economies proves that the market can fail.
- A) True
 - B) False
66. An externality is said to exist when:
- A) individuals impose costs or benefits on others, and the market provides incentives to take these costs and benefits into account.
 - B) individual actions are affected by external forces; for example, the loss of U.S. jobs due to competition from abroad is an externality.
 - C) individual actions are affected by government policies (such as taxes) that are externally imposed on the market.
 - D) individuals impose costs or benefits on others but have no incentive to take these costs and benefits into account.
67. A market economy, without any government regulation, will produce:
- A) the socially optimal quantity of pollution.
 - B) too little pollution.
 - C) the amount of pollution that maximizes total surplus.
 - D) too much pollution.
68. (flip of question on last final) Krugman and Wells define a category of goods as "artificially scarce goods. Such goods are
- A) Rivalrous and non-excludable
 - B) **Non-rivalrous (aka non-congestible) and excludable**
 - C) Rivalrous and excludable
 - D) Non-rivalrous and non-excludable

69. (modification of numbers from last final) 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 would buy and smoke. But currently cigars are not sold (it is illegal to sell cigars). The government is considering a policy that would make it legal to sell and consume cigars at a price of \$2/cigar. What is the maximum I would pay to have this policy enacted? (Note that if the demand function is $C=10-2P$, then the demand function in terms of P (the inverse demand function) is $P=5-.5C$.)
- A) \$21
 - B) \$12
 - C) \$24
 - D) \$9

One is looking form the area under the curve $P=5-.5C$, above \$2. If the price is \$2, I will buy and consume 6 cigars. So the area under $P=5-.5C$, above \$2 is half of six multiplied by 3 (3 is 5 minus 2). So the answer is \$9

I will likely ask this question again, so figure it out.

70. (modified Aplia) Roads that are open-access (common-property resources) often have an inefficient amount of traffic congestion. This happens because
- A) the marginal social cost of any one individual's use of the roads equals the individual's marginal cost.
 - B) the marginal social cost of any one individual's use of the roads is less than the individual's marginal cost.
 - C) it is impossible to compare the marginal social cost of any one individual's use of the roads with the individual's marginal cost.
 - D) the marginal social cost of any one individual's use of the roads is greater than the individual's marginal cost.
71. (Phillip) Johnny has been saving up to buy a new bike for the last year. Suddenly, bikes become much more popular causing the demand curve to shift to the right and the equilibrium price of bikes to rise. Johnny can no longer afford the bike that he wanted and is worse off. This is an example of
- A) a pecuniary externality
 - B) a negative externality
 - C) the market working efficiently
 - D) a positive externality
 - E) two of the other answers are correct

Answer Key

1. D
2. C
3. B
4. B
5. D
6. C
7. A
8. A
9. A
10. D
11. A
12. B
13. D
14. A
15. C
16. A
17. A
18. C
19. A
20. B
21. B
22. A
23. A
24. A
25. C
26. D
27. D
28. B
29. A
30. C
31. B
32. B
33. B
34. B
35. C
36. B
37. B
38. B
39. *(No Answer Provided)*
40. A
41. D
42. A
43. C
44. C

- 45. B
- 46. B
- 47. A
- 48. *(No Answer Provided)*
- 49. A
- 50. B
- 51. B
- 52. C
- 53. C
- 54. C
- 55. D
- 56. A
- 57. B
- 58. B
- 59. B
- 60. A
- 61. B
- 62. C
- 63. A
- 64. A
- 65. B
- 66. D
- 67. D
- 68. B
- 69. D
- 70. D
- 71. E