

Econ 2010 (Morey) Fall 2016  
First Midterm (Version 1)  
Oct 7, 2016

**With comments on a few of the questions.**

**Read these instructions carefully**

This exam has 54 questions and 16 pages. Make sure you have 54 questions.

The exam has four questions in it about the structure of the course. For each of these questions you answer, you will be marked correct, no matter how you answer. This gives you 4 correct answers out of 54 for free.

When we record your percentage grade on this exam we will divide the number of correct answers by 50 rather than by 54. This will help you.

For example, if you get all 54 correct, your grade will be 108%. And if you get 27 correct (half) your grade will be 54%

When answering a true/false question ignore the words “true” and “false” on the bubble sheets. That is, sometimes “true” will be bubble A and sometimes “true” will be bubble B.

Make sure you mark your bubble sheet Version 1

Note that many of the questions on this exam are variations on the questions you have seen on the Aplia quizzes or on the old exams. So, if a question looks familiar it might not be identical to a previous question. Read the questions carefully.

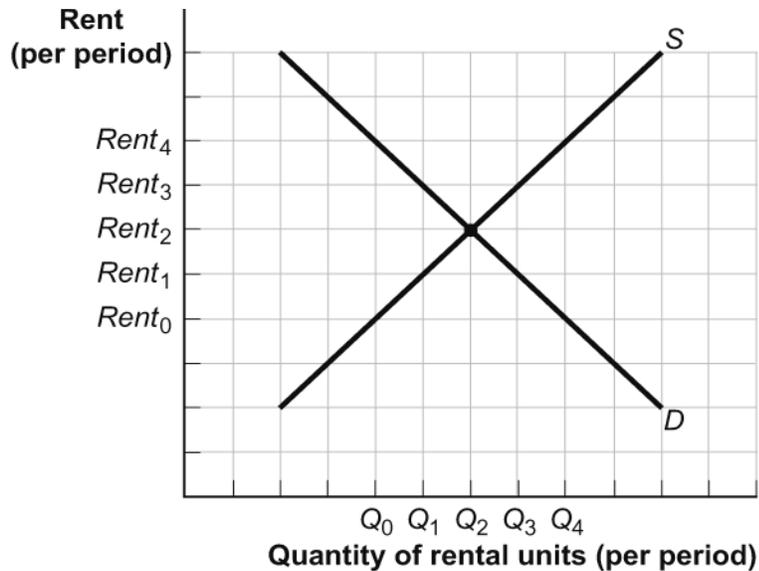
**So, in reading through the questions, we have decided that there were problems with two of the new questions. So we will increase everyone’s number of correct answers by 2. So, for example if your scantron says you got 40 questions correct, we will record you as getting 42 correct.**

**So, to calculate your percentage grade on this exam. Take your number or correct answer in terms of your scantron and the key. Then add 2 and divide by 50.**

So for example, if you got forty correct in terms of the key, your percentage grade on the midterm is  $(40+2)/50=84\%$

Use the following to answer question 1:

**Figure: Rent Controls**



1. (Figure: Rent Controls) Look at the figure Rent Controls. Suppose that rent controls are imposed. If the government wanted a rent control ceiling to be effective immediately, what is one possible price to set?
  - A)  $Rent_1$
  - B)  $Rent_2$
  - C)  $Rent_4$
  - D)  $Rent_3$
  
2. This exam was a fairly even mix of (1) the standard Aplia quiz questions, (2) the "Edward-type questions that were added to the Aplia quizzes, and other questions created by Edward and the T.A.s. (If you answer this question it will be marked correct.)
  - A) No
  - B) Not sure.
  - C) Yes
  
3. If a market is currently not in equilibrium:
  - A) no individual will be better off doing something different.
  - B) there will be opportunities available to people to make themselves better off.
  - C) it must be because the government has intervened in the market, resulting in the market's failure to reach equilibrium.
  - D) the disequilibrium will always continue unless there is government intervention.

4. An economy is said to have a comparative advantage in the production of a good if it can produce that good:
- A) with a higher opportunity cost than another economy.
  - B) outside its production possibilities curve.
  - C) at a lower opportunity cost than another economy.
  - D) with more resources than another economy.
5. Rapidly increasing health costs have been a major political concern since at least 1992. Suppose the government sets the maximum price for a normal doctor visit at \$20 to control rising health costs but the current market price is \$40. What will happen?
- A) The same number of people will try to visit the doctor, and the same number of doctors are willing to see patients at that price.
  - B) Fewer people will try to see the doctor, and fewer doctors are willing to see patients at that price.
  - C) More people will try to visit the doctor, but there will be fewer doctors willing to see patients at that price.
  - D) More people will be able to see the doctor, since the price is lower.
6. The opportunity cost of something is:
- A) what is given up to acquire it.
  - B) greater during periods of rising prices.
  - C) equal to the money cost.
  - D) less during periods of falling prices.
7. (modified text question) Economic models often:
- A) provide similar answers.
  - B) fail to explain any of the real-life scenarios they are supposed to help solve.
  - C) are correct.
  - D) vary greatly in their assumptions.
8. You are planning to study eight hours this week for your economics final and are considering studying a ninth hour. You should:
- A) compare the benefits of one more hour of study with the cost of one less hour of studying calculus.
  - B) compare the benefits of one more hour of study with the cost of one less hour of work at your part-time job.
  - C) make your decision based on the cost of the next best alternative use of your time compared to the benefit of one more hour of study.
  - D) compare the benefits of one more hour of study with the cost of one less hour of sleep.

9. Table: Workouts

number of workouts Willingness to pay for workouts  
(per week)

1	\$35
2	30
3	25
4	20
5	15
6	10
7	5

(Table: Workouts) (modification of text question) Look at the table Workouts. Suppose that Eli receives an offer from the club for a weekly membership fee of \$50 that allows him to use the club as much as he wants per week with no additional charge. Assuming Eli joins the club, how consumer surplus will he receive per week?

- A) neither of the other two answers.
- B) \$90
- C) \$140

Eli values the first workout at \$35, the second at \$30... He joins the club can go for free. He goes 7 times per week ( $5 > 0$ ). And total WTP for 7 workouts is \$140 (the sum of the column). But he paid \$50 for the free entry for the week, so he get a surplus of \$90.

If I ask this question again I will modify it in two ways: say “WTP for each additional workout” in the title of the table, and add an 8<sup>th</sup> row with a WTP of 0.

10. The United States has which type of economic system?

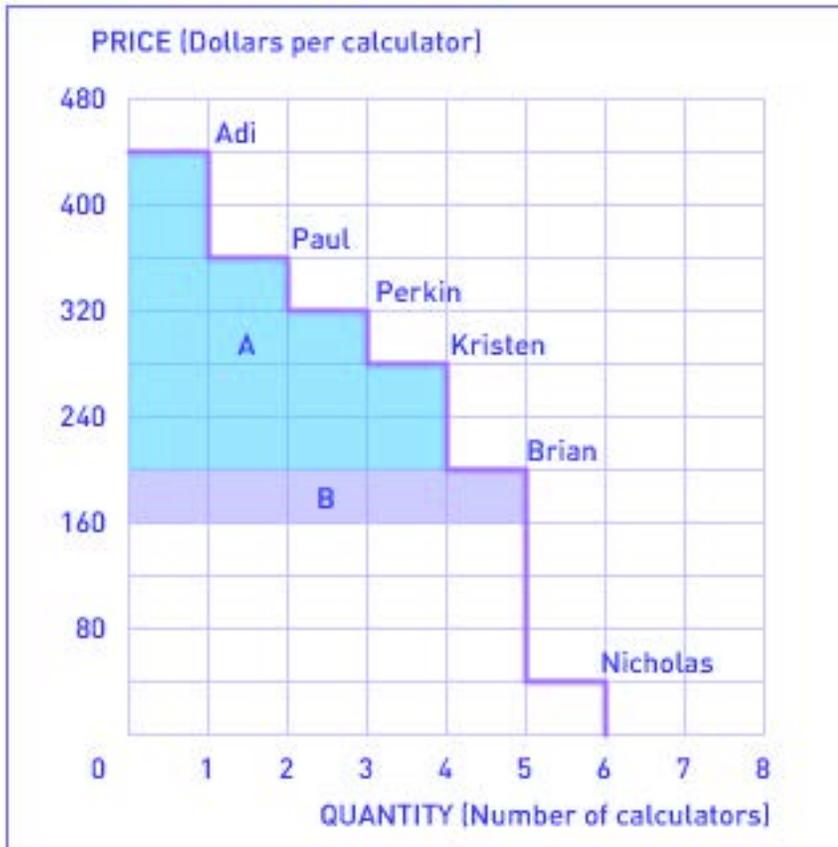
- A) Command and Control Economy
- B) Market Economy
- C) Mixed Economy
- D) None of the above

11. From my personal perspective. Edward's examples in class (not the examples from the book) are: (Choose the answer that applies to you. If you answer your answer will be marked correct.)

- A) Fine with me, and less boring than the book examples about butter and whatever, but sometimes I cannot figure out how they relate to the economic concept under discussion.
- B) Sometimes offend me and typically they do not help me understand the material.
- C) Fine with me, and less boring than the book examples about butter and whatever, and they help me to better understand the material.
- D) Help me to understand the material but sometimes I am personally offended by them.

12. (modification of text question) Because of the opportunity cost, if the United States spends \$87 billion of its resources in the rebuilding of Iraq, it has to forgo the opportunity to using those resources for other programs.
- A) False
  - B) True
13. (modified text questions) Economists may disagree about policies because they:
- A) only consider issues in positive economics.
  - B) assume different things in their models.
  - C) enjoy disagreeing with each other.
14. An example from the class notes: In places like Aspen, If wood-burning fireplaces and stoves are unregulated there will be too much smoke from an efficiency point of view: Aspen is a box canyon and the smoke has nowhere to go. The city government is consider requiring permits for wood-burning devices. Which of the following narratives is, in Edward's view, both correct and most generally informative? (asked on the Aplia quiz on messing with markets)
- A) Without government intervention the market is failing.
  - B) This is an example where a binding quota, achieved by requiring but limiting the number of permits, can increase efficiency (achieves the efficient number of wood-burning devices) rather than causing inefficiency.
  - C) The city government can correct the inefficiency by requiring a permit/medallion for each wood-burning device.
  - D) When equilibrium is achieved in the market for permits those with the highest WTP for permits will not necessarily hold all of the permits.
15. When the government removes a binding price floor:
- A) excess demand will develop.
  - B) excess supply will develop.
  - C) quantity demanded will increase and quantity supplied will decrease.
  - D) quantity demanded will decrease and quantity supplied will increase.

16. (modified test bank question) The following graph shows the demand curve for a group of students in the market for a graphing calculator. Each student wants only one calculator. Assume the market price is \$200. Assume that if an individual has a willingness to pay (WTP just equal to the market price, he or she will make the purchase.



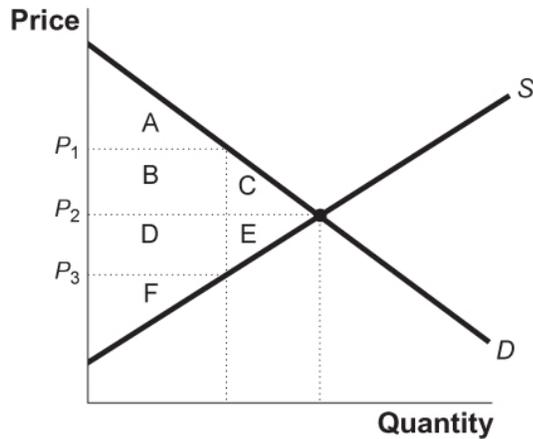
Brian's consumer surplus from his calculator purchase is? (Choose the answer that is both correct and most informative.)

- A) Zero because his WTP for a calculator is \$200 and he pays \$200.  
 B) Positive, otherwise he would not have bought the calculator.  
 C) Positive because he paid less than is WTP.  
 D) Zero because he does not buy a calculator
17. Which of the following is a quota?
- A) property taxes on beachfront property in Florida  
 B) limits on the number of bushels of clams that can be caught in New Jersey  
 C) the maximum reimbursement that insurance will pay for a medical procedure  
 D) rent controls in New York City

18. A consumer's willingness to pay for a surfboard is the minimum price at which he or she would buy the surfboard.
- A) False
  - B) True

Use the following to answer question 19:

**Figure: Gain in Consumer Surplus**



19. (Figure: Gain in Consumer Surplus) (modified text question) Look at the figure Gain in Consumer Surplus. Identify the area or areas that represent the gain in consumer surplus to those consumers already buying at  $P_1$  when the price falls from  $P_1$  to  $P_2$ .
- A) A and B
  - B) B
  - C) B and C
  - D) C

Almost everyone got this on wrong, and for good reason. This is question that I modified from the book, and I implicitly made an assumption that is critical. So, we are going to increase everyone's number of correct answers by 1.

In explanation, I assumed, implicitly, that every buyer only buys one unit of the good. In which case if the price falls from  $P_1$  to  $P_2$  the additional amount purchased is purchased by only new buyers (those who have not already bought). In that case the correct answer is B. But unless we specify my unspecified assumption the correct answer would be B plus some or all of C.

Sorry.

20. Market failure may occur because:
- A) of regulated self-interest.
  - B) all goods are suited for efficient management by markets.
  - C) individual actions have side effects that are not properly taken into account by the market.
  - D) one party to a trade benefits more than another.
21. The Atlanta Symphony wants to make sure that its concerts are affordable for all residents of Atlanta and therefore prices all of its tickets at \$25. However, outside Symphony Hall, people can sell the same tickets for \$75 or more. The true cost to the concertgoer of a ticket to the symphony is at least:
- A) \$75.
  - B) \$100.
  - C) \$50.
  - D) \$25.
22. If a supply curve (price on the vertical axis, quantity on the horizontal axis) is represented by the equation  $Q = 10 + 2P$ , what is its slope of the graph?
- A) 1
  - B) 5
  - C)  $\frac{1}{2}$
  - D) 2

The graph has price on the vertical axis, quantity on the horizontal axis. But the question is specified as Q as a function of P, so to get the slope of P as a function of Q you have to solve  $Q=10+2P$  for P to get  $P=-5+(1/2)Q$

23. Suppose the U.S. government imposes a binding quota on the number of Japanese-made cars allowed into the United States. Assuming that Japanese-made cars and U.S.-made cars are substitutes in consumption, we would expect the price of Japanese cars to \_\_\_\_\_ and the price of U.S.-made cars to \_\_\_\_\_.
- A) decrease; increase
  - B) decrease; decrease
  - C) increase; decrease
  - D) increase; increase

The binding quota on the number of Japanese cars imported, reduces the supply of Japanese cars in the U.S. market (the supply curve shift left—there are fewer to sell), this will increase the price of Japanese cars in the U.S.

The binding quota on the number of Japanese cars imported, causes their U.S. price to increase. This shifts the demand function for domestic cars to the right (greater demand at every price). This will increase the price of domestic cars.

Use the following to answer question 24:

**Figure: Monthly Demand for Ice Cream Cones**

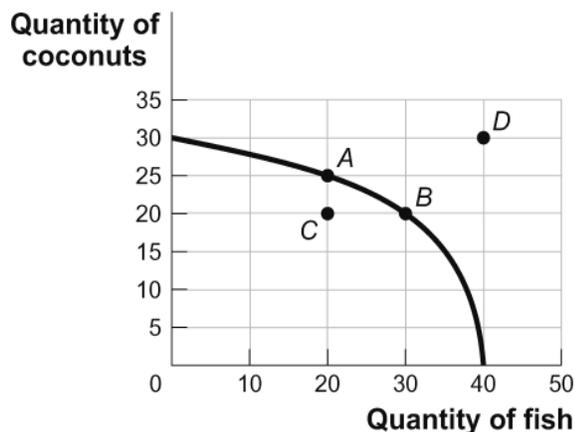


24. (Figure: Monthly Demand for Ice Cream Cones) The graph Monthly Demand for Ice Cream Cones shows one individual's monthly demand for ice cream cones. At \$5 per cone, this individual will consume 10 cones in a month. How much consumer surplus does this consumer receive?
- A) \$150
  - B) \$100
  - C) \$500
  - D) \$50
25. If farmer Sam MacDonald can produce 200 pounds of cabbages and no potatoes or no cabbages and 100 pounds of potatoes and if he faces a linear production possibility frontier, the opportunity cost of producing an additional pound of cabbage is \_\_\_\_\_ pound(s) of potatoes.
- A) 100
  - B) 200
  - C) 2
  - D) 0.5

26. Assume the following: (1) Members of the Tea Party are not Democrats. (2) The existence of the Tea Party makes Democrats happy. (3) Happy people never smile. (4) Obama belongs to the tea party. (5) Sarah P. is not a Republican. (6) The Tea Party exists. And (7) Democrats are people. Which of the following predictions follows from these assumptions? (Asked on an Aplia quiz)
- A) Democrats are not smiling, and Obama is not a Democrat
  - B) Obama is not smiling
  - C) All the members of the Tea Party are smiling
  - D) Obama is smiling
  - E) All Republicans are smiling
27. Consider the book chapters, the Aplia quizzes, Edward's lectures, and the old exams. Which one has been the most effective in terms of your learning the material. (If you answer the question it will be marked correct.)
- A) The Aplia quizzes
  - B) The old exams.
  - C) The book chapters
  - D) Edward's lectures

Use the following to answer question 28:

**Figure: Tom's Production Possibilities**



28. (Figure: Tom's Production Possibilities) (modified text question) Look at the figure Tom's Production Possibilities. The opportunity cost for Tom to move from point C to point A is:
- A) There is no opportunity cost.
  - B) 5 coconuts.
  - C) 10 coconuts.
  - D) 30 fish.

Use the following to answer question 29:

**Table: Wages and Hours Worked**

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

29. (Table: Wages and Hours Worked) Look at the table Wages and Hours Worked. Graphing the relation with wages on the vertical axis and hours worked on the horizontal axis, the slope between point *A* and point *B* is:
- A) 5.
  - B)  $2/5$ .
  - C) 2.5.
  - D) 2.
30. (modified text question) If New York City eliminates its medallion system for taxicabs, assuming that the supply curve of taxicab rides is upward-sloping and the demand curve for taxicab rides is downward-sloping, the price of a taxicab ride would:
- A) increase, but only slightly.
  - B) increase because of the higher safety hazards.
  - C) not change from its current level.
  - D) decrease.
31. A price ceiling will have NO effect if:
- A) it creates a shortage.
  - B) it is set below the equilibrium price.
  - C) it is set above the equilibrium price.
  - D) the equilibrium price is above the price ceiling.
32. The study of economics arises because of the necessity of choice, and the necessity of choice arises because of the fundamental problem of scarcity of resources.
- A) False
  - B) True

33. (modification of text question) Equilibrium exists when:
- A) scarcity is eliminated.
  - B) no economic agent has an incentive to change their behavior. .
  - C) output is distributed equitably.
  - D) some economic agents would be better off taking different actions.
34. (Viviana) Your theory makes three assumptions: (1) Kids who have divorced parents are unhappy. (2) Unhappy kids earn failing grades. (3) Zack earns failing grades. Which of the following statements is both correct: and most informative?
- A) The three assumption do not imply that Zack has divorced parents.
  - B) The three assumptions imply that Zack has divorced parents.
35. How people choose among the alternatives available to them is:
- A) not important in the study of microeconomics.
  - B) the study of microeconomics.
  - C) not part of the study of economics.
  - D) impossible to describe.
36. (modification of text question) *Market failure* refers to a situation in which:
- A) something in the nature of the markets causes the market equilibrium to be inefficient.
  - B) market-determined wages are not high enough to raise all workers above the poverty line.
  - C) markets fail to reach a fair outcome.
  - D) markets establish a high price for necessities.
37. If all of the opportunities to make someone better off without making someone else worse off have been exploited, an economy is:
- A) marginally optimal.
  - B) equitable.
  - C) efficient.
  - D) inefficient.

38. (Kas) Assume one model uses inflation to explain unemployment, and another model uses unemployment to explain inflation. In the first model, inflation is an \_\_\_ variable and in the second model it is an \_\_\_\_ variable.

- A) endogenous, endogenous
- B) exogenous, exogenous
- C) exogenous, endogenous
- D) endogenous, exogenous

In the first model inflation is an exogenous variable, but in the second model inflation is an endogenous variable (the variable we want to explain)

39. (modified text questions) ;A consumer's willingness to pay for each additional unit of a good identifies her \_\_\_\_\_ for that good.

- A) demand curve
- B) producer surplus
- C) cost of production
- D) supply curve

40. Consumer surplus for an individual buyer is equal to:

- A) the price of the good minus the marginal cost of producing the good.
- B) the marginal cost of the good minus the consumer's willingness to pay for the good.
- C) the consumer's willingness to pay for the good minus the marginal cost of producing the good.
- D) the consumer's willingness to pay for the good minus the price of the good.

Use the following to answer question 41:

**Table: Economics Textbooks**

<b>Consumer</b>	<b>Price the Consumer Is Willing to Pay</b>
Eric	\$175
Margaret	150
Leah	100
Michael	75

41. (Table: Economics Textbooks) (modified text question) The table Economics Textbooks shows how much money four consumers would each be willing to pay for a new economics textbook. If the price of the textbook is \$100, what is the total consumer surplus received by these consumers?
- A) \$100
  - B) \$125
  - C) \$75
  - D) \$500
42. (Kas) Society is made up of only Jane and wolves. Jane likes to run with the wolves and deer, but they don't like to run with her. Note that the deer are not members of society. Currently, Jane is not allowed to run with the deer or the wolves. What of the following changes would **necessarily** increase efficiency? (Choose the answer that is both correct and most informative.)
- A) Jane is allowed to run with the wolves.
  - B) Jane is allowed to run with both the deer and the wolves.
  - C) The situation is already efficient.
  - D) Jane is allowed to run with the deer.

The **imagined** answer: Jane is a member of society, the deer are not so allowing Jane to run with the deer makes Jane a member of society better off and makes not member of society worse off, so the D will necessarily increase efficiency.

**Continuing with our imagined answer:** C obviously not efficient if one could make things more efficient by allowing Jane to run with the wolves. A and B might or might not increase efficiency (Jane is make better off and the wolves are made worse off).

The problem with our imagined answer is that it implicitly assumes the wolves are indifferent to Jane running around chasing the deer, which might not be the case.

So, sorry again. We cannot be sure that D is efficiency increasing unless we assume the wolves do not care if Jane chases them. So everyone gets a second extra correct answer.

As an aside. Kas was likely alluding to the book *Women who run with the wolves*.

43. (modified test bank) Consider two competing motorcycle manufacturers, Harley-Davidson and Honda. If Harley-Davidson raises the price of its motorcycles, we can expect: (assume \$ on the vertical axis, quantity on the horizontal axis)
- A) a shift to the left in the supply curve of Hondas and higher prices for Hondas.
  - B) a shift to the right in the demand curve for Hondas and higher prices for Hondas.
  - C) a shift to the left in the demand curve for Hondas and lower prices for Hondas.
  - D) a shift to the right in the supply curve of Hondas and lower prices for Hondas.
44. (modified text question) If goods A and B are substitutes, a decrease in the price of good B will:
- A) shift the demand curve for good B to the right.
  - B) shift the demand curve for good B to the right and shift the demand curve for good A to the left.
  - C) shift the demand curve for good A to the right.
  - D) [shift the demand curve for good A to the left.](#)  
[If goods A and B are substitutes, a decrease in the price of good B will cause the demand curve for good A to shift to the left \(less demand at every price\). The shift occurs because the substitute is no cheaper, making A relatively more expensive at the same nominal price.](#)
45. (M and C) Khalil is offered a free ticket to the opera. His opportunity cost of going to the opera is:
- A) Whatever Khalil would choose to do if he does not go to the opera including any money he could get from scalping the ticket.
  - B) whatever Khalil would choose to do if he does not go to the opera.
  - C) the price listed on the ticket and whatever Khalil would choose to do if he does not go to the opera.
  - D) zero—the tickets were free.
46. Consider the book chapters, the Aplia quizzes, Edward's lectures, and the old exams. Which one has been the least effective in terms of your learning the material? (If you answer the question it will be marked correct.)
- A) Edward's lectures
  - B) The book chapters
  - C) The old exams.
  - D) The Aplia quizzes
47. An economy is efficient if one person can be made better off by reallocating resources without making anyone else worse off.
- A) False
  - B) True

48. Market equilibrium will always be efficient even if it is not equitable.  
 A) False  
 B) True
49. (modified from test bank) Given that the supply curve is upward sloping, a shift of a demand curve to the right (\$ on the vertical axis), all other things unchanged, will:  
 A) decrease equilibrium quantity and increase equilibrium price.  
 B) increase equilibrium quantity and decrease equilibrium price.  
 C) decrease equilibrium price and quantity.  
 D) increase equilibrium price and quantity.
50. (Griffen question) Which of the following would cause the demand for chocolate bars to increase while not shifting the demand curve for chocolate bars (price on the vertical axis, quantity on the horizontal axis)?  
 A) The US government imposing a binding price ceiling on Reese's Pieces.  
 B) Both of the other two answers are correct.  
 C) A increase in the supply of chocolate bars at every price.

An increase in the supply of chocolate bars at every price (supply curve shifting right, price on the vertical axis) will c.p. decrease the price of chocolate bars (a movement along the static demand curve).

If the government imposes a binding price ceiling the price will fall from the current price to the binding price ceiling, causing demand to increase because price has fallen, the demand function remaining static.

Use the following to answer question 51:

**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

51. (Table: Production Possibilities Schedule I) Look at the table Production Possibilities Schedule I. The opportunity cost of producing the fourth unit of consumer goods is \_\_\_\_\_ units of capital goods.  
 A) 6  
 B) 2  
 C) 8  
 D) 4

To produce 4 rather than three units of consumptions good, society has to move from the point on the curve (3,18) to the point (4, 10) so give up 8 units of capital goods.

52. If they spend all night writing computer programs, Laurence can write 10 programs, and Carrie Anne can write 5. If they spend all night making sunglasses, Laurence can make 6 pairs, and Carrie Anne can make 4. We know that:
- A) Carrie Anne's opportunity costs of writing programs and of making sunglasses are less than Laurence's.
  - B) Laurence's opportunity cost of writing programs is less than Carrie Anne's.
  - C) Carrie Anne's opportunity cost of writing programs is less than Laurence's.
  - D) Laurence's opportunity costs of writing programs and of making sunglasses are less than Carrie Anne's.
53. (modification of existing question) Binding quotas on the amount of a good that can be produced **necessarily** cause inefficiency. (asked on the Aplia quiz on messing with markets.)
- A) This statement is incorrect
  - B) There is not enough information provided to determine whether the statement is correct or incorrect.
  - C) This statement is correct

Binding quota on the amount of a good that is produced will often produce inefficiency, but do not necessarily cause inefficiency.

We had an example in class, wood-burning stoves in Aspen were the binding constraint on the number of stoves increased efficiency (helped to correct a market failure.) See question 14 on this exam.

You should be very attentive to the word “necessarily”.

54. (modified text question)The federal government regulates how much carbon dioxide a factory can emit. This statement best represents this economic concept:
- A) Markets usually lead to efficiency.
  - B) Resources are scarce.
  - C) When markets don't achieve efficiency, government intervention can increase efficiency.
  - D) “How much” is a decision at the margin.

## Answer Key

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

- 45. A
- 46. *(No Answer Provided)*
- 47. A
- 48. A
- 49. D
- 50. B
- 51. C
- 52. B
- 53. A
- 54. C