

Economics 101/1
Fall 2013
10/8/13
First Midterm

Name _____
TA Name _____
Discussion Section # _____
Student ID # _____

Version 1

DO NOT BEGIN WORKING UNTIL THE INSTRUCTOR TELLS YOU TO DO SO.
READ THESE INSTRUCTIONS FIRST.

You have 75 minutes to complete the exam. The exam consists of 30 multiple choice questions. Each multiple choice question is worth 3.3 points for a total of 99 points.

- We reserve the right to deduct one point for failing to fill out the scantron completely and accurately. If you provide this information accurately you will get the last point: making the exam a 100 point exam. Sign the honor code statement as well.
- Answer all questions on the scantron sheet with a #2 pencil.

NO CELL PHONES, CALCULATORS, OR FORMULA SHEETS ARE ALLOWED.
PICK THE BEST ANSWER FOR EACH QUESTION.

★How to fill in the scantron sheet:

1. Print your last name, first name, and middle initial in the spaces marked "Last Name," "First Name," and "MI." Fill in the corresponding bubbles below.
2. Print your student ID number in the space marked "Identification Number." Fill in the bubbles.
3. Write the number of the discussion section for which you're registered under "Special Codes" spaces ABC, and fill in the bubbles. You can find the discussion numbers below on this page.
4. Write the version number of your exam booklet under "Special Codes" space D, and fill in the bubble. The version number is on the top of this page.

If there is an error on the exam or you do not understand something, make a note on your exam booklet and the issue will be addressed AFTER the examination is complete. No questions regarding the exam can be addressed while the exam is being administered.

When you are finished, please get up quietly and bring your scantron sheet and this exam booklet to the place indicated by the instructors.

Discussion sections are as follows:

Gueyon Kim	Wooyoung Kim	Aiday Sikhova	Moheb Zidan	Alexander Clark
Fri 8:50 317	Thur 3:30 301	Thur 3:30 304	Fri 8:50 318	Fri 11:00 309
Fri 9:55 311	Thur 4:35 307	Thur 4:35 306	Fri 1:20 305	Fri 12:05 315
Fri 12:05 316	Fri 9:55 312	Fri 1:20 319	Fri 2:25 302	
Fri 1:20 314	Fri 11:00 310	Fri 2:25 313		

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MULTIPLE CHOICE QUESTIONS (30 QUESTIONS EACH WORTH 3.3 POINTS)

Honor Code Statement for Exam:

I, _____, agree to neither give help to others on this exam nor receive any help on this exam from others. I understand that the use of a calculator on this exam is an act of academic misconduct and that I am not to have a cellular phone on my person. It is important to me to be a person of integrity and that means that ALL ANSWERS on this exam are my answers.

Furthermore, I understand that it is my responsibility to keep my answers covered and that failure to do so may be construed as academic misconduct.

Signed _____

1. Scarcity of resources implies that the production possibilities frontier
 - a.) will shift in over time.
 - b.) will shift out over time.
 - c.) will bow away from the origin.
 - d.) will have a negative slope.

2. Suppose that initially there are three producers in a market for good X and that they all have identical, upward sloping firm supply curves. Furthermore, the market demand curve for this product obeys the law of demand. This market is initially in equilibrium. Then, one of the producers leaves the market. Holding everything else constant, which of the following statements is true?
 - a.) The market supply curve will shift, rotating to the left (counter-clockwise).
 - b.) At the new equilibrium, the remaining firms in the market will find that they are individually selling a larger quantity of the good than they were individually selling before.
 - c.) The total amount of the good provided in the market is smaller than it was when there were three firms producing the good.
 - d.) Answers (a), (b), and (c) are all true statements.

3. Jim Jarmusch can make one feature film and six short films. Alternatively, he can make three features and two shorts. Assuming constant opportunity cost, which of these statements is certainly true?
 - a.) Jim can make 2 features and 3 shorts, but this point is not productively efficient (that is, this point is not on his PPF).
 - b.) Jim can produce 8 features and 0 shorts.
 - c.) Jim can produce 4 features and 0 shorts, but this point is not productively efficient (that is, this point is not on his PPF).
 - d.) Jim has a comparative advantage in short films.

Use the following information for the next three (3) questions.

The demand and supply curves in the market for whiskey are given by the following equations:

$$\text{Demand: } Q^D = 120 - 3P$$

$$\text{Supply: } Q^S = 2P$$

Where Q is the quantity of whiskey in bottles and P is the price per bottle of whiskey. Suppose that the government in this economy has levied an excise tax of \$5 on the suppliers of whiskey.

4. Given the above information and holding everything else constant, what is the deadweight loss resulting from the imposition of this excise tax?
 - a.) \$15
 - b.) \$24
 - c.) \$26
 - d.) \$30

5. The tax revenue received by the government due to the imposition of this excise tax is equal to
 - a.) \$75
 - b.) \$120
 - c.) \$210
 - d.) \$250

6. The described excise tax is imposed on producers of whiskey: this implies that the suppliers in this market incur 100% of the tax nominally. In terms of economic incidence, what percentage of the tax is actually borne by suppliers?
 - a.) 0%
 - b.) 40%
 - c.) 60%
 - d.) 100%

7. Kanit and Gueyon each own an identical toy. Kanit values his toy at \$15 and Gueyon values hers at \$5. Along come Alana and Este, neither of whom own such a toy. Alana would be willing to pay up to \$20 for the toy and Este would pay up to \$7. If the four are allowed to trade with each other, what is the maximum total surplus possible given this information and holding everything else constant?
- a.) \$15
 - b.) \$13
 - c.) \$7
 - d.) \$2
8. According to the theory of comparative advantage, which of the following is not a reason why countries trade?
- a.) Specialization by comparative advantage allows for more consumption possibilities.
 - b.) Costs are higher in one country than in another.
 - c.) The productivity of labor differs across countries and industries.
 - d.) Exports give a country a political advantage over countries that export less.

Use the following information for the next two (2) questions.

George's PPF for today is given by the equation below, where Y is the number of machines produced today, X is the quantity of perishable manna produced today, and M is the amount of machines he has at the beginning of the day which are used for production of X and Y:

$$\text{PPF: } Y = 4M - (1/2)X$$

The manna George produces must be consumed today while the additional machines that George produces today will be used in future days to produce either more manna or more machines. Tomorrow, the PPF will be the same but with an updated value of M (usable machines). Assume that machines once produced, last forever. Currently, George owns one machine.

9. If George produces and consumes 6 units of manna today, what is the maximum amount of manna he could consume tomorrow?
- a.) 6 units of manna
 - b.) 8 units of manna
 - c.) 16 units of manna
 - d.) 24 units of manna
10. What is the opportunity cost of consuming manna today in terms of manna tomorrow? In other words, how much more manna could George have tomorrow if he foregoes one unit of manna today?
- a.) $\frac{1}{2}$ additional units of manna tomorrow
 - b.) 2 additional units of manna tomorrow
 - c.) 4 additional units of manna tomorrow
 - d.) 8 additional units of manna tomorrow

11. Suppose that the market demand curve can be described by the equation $P = \$1$. Given this information and holding everything else constant, which of the following statements is true? Assume that the market supply curve in this market is upward sloping.
- a.) If the demand curve is $P = \$1$, then there is no producer surplus in this market.
 - b.) If the demand curve is $P = \$1$, then there is no total surplus in this market.
 - c.) If the demand curve is $P = \$1$, then there is no consumer surplus in this market.
 - d.) If the demand curve is $P = \$1$, then the “short side” of the market will be the demand side.
12. Consider the lobster market. In this market both the demand and the supply curves are linear. When the price is \$10, the quantity sold is 10 and there is a surplus of an additional 10 lobsters. Also, when the price is \$5, the quantity of lobsters sold is 10 and there is a shortage of 5 lobsters. Given this information and holding everything else constant, what will be the quantity of lobsters sold in equilibrium in this market?
- a.) $20/3$
 - b.) $40/3$
 - c.) $25/2$
 - d.) 15
13. Suppose there is one firm in the laptop market. Now, another firm enters and begins producing identical laptops. Which of the following statements is true holding everything else constant?
- a.) Both the equilibrium price and the equilibrium quantity in this market will decrease.
 - b.) The demand curve will shift to the right.
 - c.) Consumer surplus will increase.
 - d.) The supply curve will shift to the left.
14. Moheb can produce 10 kg of Mate (a type of Yerba) or 10 bottles of Arak (a type of drink). Moheb discovers a new technology which allows him to produce more Mate and more Arak. Given the above information and holding everything else constant, which of the following statements is true?
- a.) The opportunity cost of producing Arak will decrease.
 - b.) The opportunity cost of producing Arak will increase.
 - c.) The opportunity cost of producing Mate will not change.
 - d.) The opportunity cost of producing Arak might increase, decrease, or remain unchanged.

15. Many fans of the Milwaukee Brewers baseball team were disappointed by the news that Ryan Braun violated the league drug policy. Suppose many of these fans quit going to the Brewers home games and the team owner responded by lowering ticket prices for these games. Given this information and holding everything else constant, which of the following statements is the best explanation for why the owner lowered ticket prices?
- The demand curve for tickets to the Brewers home games shifted to the right.
 - The demand curve for tickets to the Brewers home games shifted to the left.
 - The demand curve for tickets to the Brewers home games did not shift but the supply curve did shift to the right.
 - From the given information it is impossible to come up with a likely explanation for this change in the price of Brewers tickets.

Use the following information for the next two (2) questions.

The below table describes the production possibilities of Atticus and Cunningham if they either *only* gather hickory nuts or *only* compose legal documents, each using an equal amount of resources. Assume constant opportunity cost for both Atticus and Cunningham.

	Hickory nuts	Legal documents
Atticus	3 bushels per day	3 documents per day
Cunningham	2 bushels per day	1 document per day

16. What is the opportunity cost of gathering one bushel of hickory nuts for each person?
- Atticus: one legal document, Cunningham: two legal documents
 - Atticus: one legal document, Cunningham: $\frac{1}{2}$ legal documents
 - Atticus: one bushel of hickory nuts, Cunningham: two legal documents
 - Atticus: three legal documents, Cunningham $\frac{1}{2}$ legal documents
17. Now the two men begin to trade, each specializing according to his comparative advantage. Which of the following trade prices would be rejected by Cunningham?
- 1 bushel of hickory nuts for 1 legal document
 - 1 legal document for 4 bushels of hickory nuts
 - 1 legal document for 0.25 bushels of hickory nuts
 - 1 bushel of hickory nuts for 3 legal documents

18. Consider the market for hamburgers which is initially in equilibrium. Suppose that there is an economic downturn which lowers people's incomes while, at the same time, activists liberate thousands of beef cattle, decreasing the supply of meat for hamburgers at every price. If hamburgers are an inferior good for consumers in this market, what do you predict will happen to the equilibrium price and equilibrium quantity in this market relative to the initial equilibrium levels?
- a.) The equilibrium price and the equilibrium quantity will increase relative to the initial equilibrium level.
 - b.) The equilibrium price will increase and the equilibrium quantity will decrease relative to the initial equilibrium level.
 - c.) The equilibrium price will increase, and the new equilibrium quantity may increase, decrease, or remain unchanged relative to the initial equilibrium level.
 - d.) The equilibrium quantity will decrease, and the new equilibrium price may increase, decrease, or remain unchanged relative to the initial equilibrium level.

Use the following information to answer the next two (2) questions.

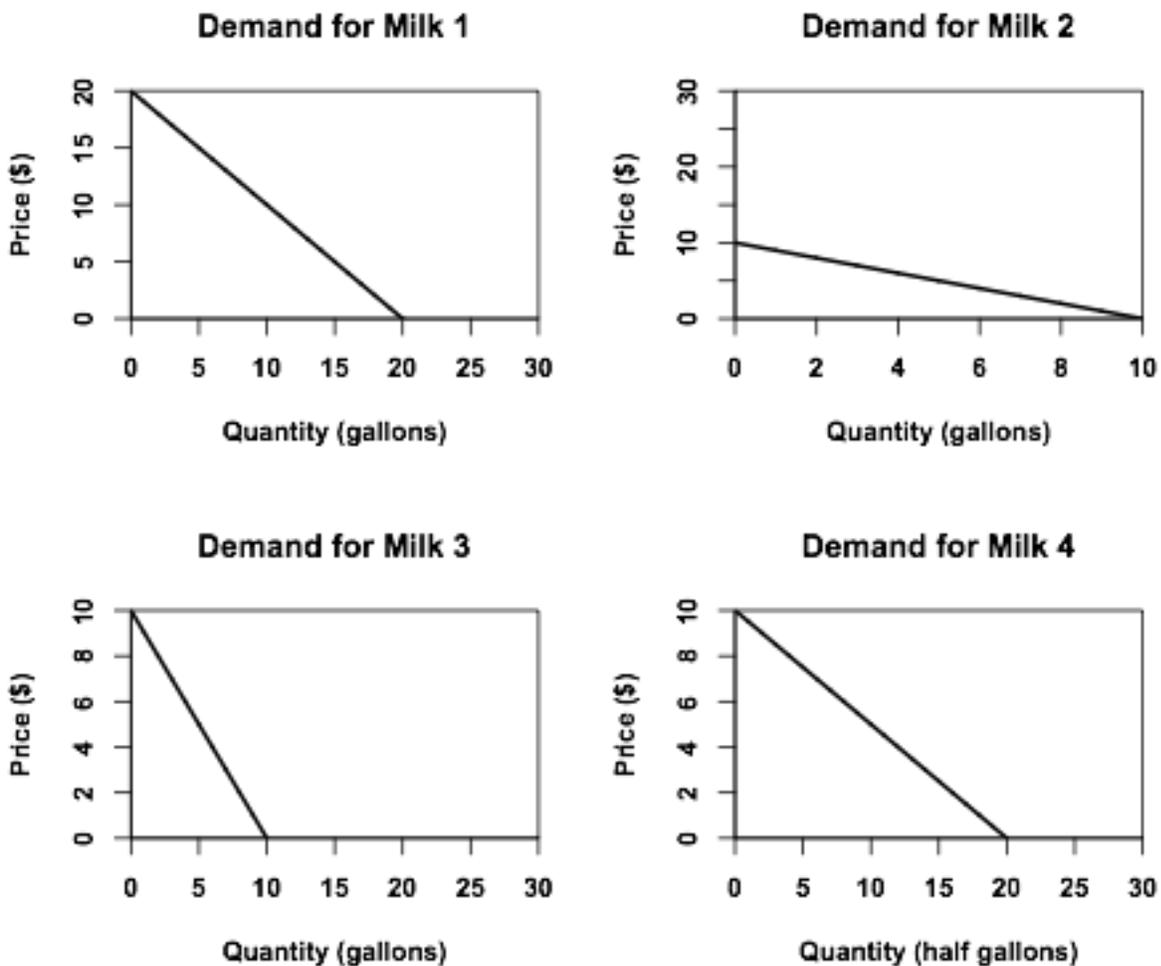
Aiday and Wooyoung spend their time saving dolphins and brokering peace treaties. If Aiday only brokers peace treaties, she can produce 20 peace treaties per year. If she only saves dolphins, she can save 10 dolphins per year. Wooyoung can save 25 dolphins per year or broker 40 peace treaties per year. Both Aiday and Wooyoung have constant opportunity costs of producing these two goods.

19. Given this information what is the equation for their joint PPF? In your answer, measure dolphins on the x-axis and measure peace treaties on the y-axis.
- a.) $Y = 60 - (8/5)X$, for $X < 25$ and $Y = 70 - 2X$, for $X \geq 25$.
 - b.) $Y = 60 - (8/5)X$, for $X < 25$ and $Y = 64 - (8/5)X$, for $X \geq 25$.
 - c.) $Y = 60 - 2X$, for $X < 10$ and $Y = 56 - (8/5)X$, for $X \geq 10$.
 - d.) $Y = 60 - 2X$, for $X < 25$ and $Y = 56 - (8/5)X$, for $X \geq 25$.
20. Which of the following statements is a normative statement?
- a.) Aiday can save more dolphins than Wooyoung.
 - b.) Wooyoung has an absolute advantage in brokering peace treaties.
 - c.) Every peace treaty brokered by Aiday comes at the cost of 2 dolphin lives.
 - d.) Aiday should only broker peace treaties and Wooyoung should only save dolphins.

21. The people of Italy trade with the people of France. The only two goods that these two countries trade with one another are cheese and wine, and each country has the same amount of resources. Italy produces more wine and cheese than France. Italy also produces more wine than cheese. Given this information, which of the following statements could we conclude?

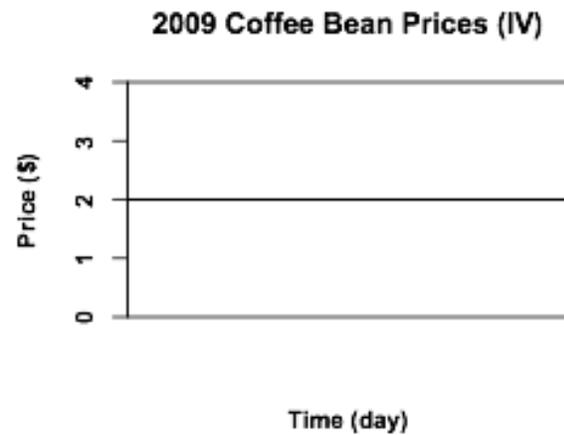
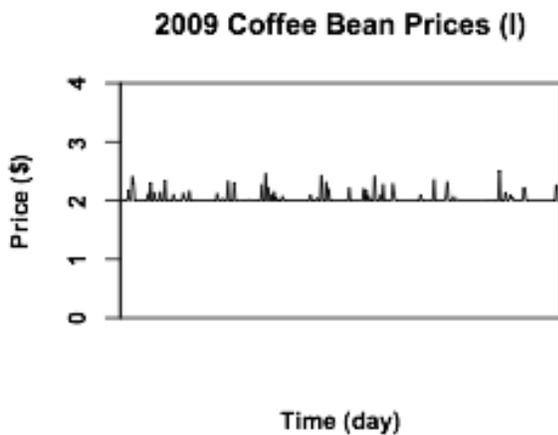
- a.) Italy must have a comparative advantage in cheese.
- b.) France must have a comparative advantage in cheese.
- c.) Italy must have an absolute advantage in both wine and cheese.
- d.) France must have an absolute advantage in both wine and cheese.

22. Carefully examine the demand curves shown below. Which of them are the same?



- a.) Demand curves 1 and 4
- b.) Demand curves 2 and 3
- c.) Demand curves 2, 3, and 4
- d.) Demand curves 1, 2, and 3

23. Economics is the study of
- rational people in market economies who face tradeoffs.
 - choice under conditions of scarcity.
 - political organization under conditions of opportunity cost.
 - the incentives created by financial and regulatory institutions.
24. There is a price floor on the prices paid to coffee bean growers in the market for fair trade coffee beans. Suppose that for the entire duration of 2009, there was a price floor of \$2. The graphs below show time series data for prices in the coffee bean market. Which of these graph(s) could not reflect a price floor of \$2? Refer to each graph by the Roman numerals in parentheses.



- I and III
- II and III
- I, II, and III
- III

Use the following information for the next two (2) questions.

Suppose that in an economy there are only two different goods produced, guns and butter. Coincidentally, in this economy, both of these goods markets are described by the same supply and demand curves. These curves for guns are given below (the curves for butter are exactly the same):

$$\text{Demand curve for guns: } P = 12 - Q^D$$

$$\text{Supply curve for guns: } P = Q^S$$

25. What is the deadweight loss generated by placing an excise tax of \$2 on only the market for guns? What if the tax on guns is doubled to \$4?
- a.) The deadweight loss is \$1 and it is \$2 when the tax is doubled.
 - b.) The deadweight loss is \$1 and it is \$4 when the tax is doubled.
 - c.) The deadweight loss is \$2 and it is \$4 when the tax is doubled.
 - d.) The deadweight loss is \$2 and it is \$8 when the tax is doubled.
26. Governments face a dilemma; they must raise tax revenue without creating too much deadweight loss. Which of the following excise tax strategies should the government pursue to minimize deadweight loss in this two good economy? Assume a fixed and equivalent amount of tax revenue must be generated from each strategy.
- a.) Impose all excise taxes on the suppliers of a single good.
 - b.) Impose an equal level of excise tax on each market.
 - c.) Impose an excise tax on a single good, where half of the tax is paid by producers and half is paid by consumers.
 - d.) The excise tax policies described in (a), (b), and (c) produce the same deadweight loss.

Use the following information for the next two (2) questions.

The demand and supply curves for oil are given below where Q is the quantity of oil and P is the price of oil.

$$\text{Demand: } Q^D = 100 - 2P$$

$$\text{Supply: } Q^S = P - 20$$

27. Concerned about climate change, the government in this economy decides to set a quota control of 10 units of oil in this market. When the government limits oil to this level, what is the price that oil sells for in this market?
- a.) \$30
 - b.) \$40
 - c.) \$45
 - d.) \$80
28. Suppose the government is considering replacing the quota control of 10 units with an excise tax of \$15 per unit of oil consumed. Which policy would oil suppliers prefer? Which policy would oil consumers prefer?
- a.) The oil suppliers and oil consumers prefer the quota.
 - b.) The oil suppliers prefer the excise tax and the oil consumers prefer the quota.
 - c.) The oil suppliers and oil consumers are indifferent about these two policies.
 - d.) The oil suppliers prefer the quota and the oil consumers are indifferent about the two policies.

29. Alex, Zander, and Clark are the only three consumers in the market for oatmeal. They have the following individual demand curves for oatmeal. The market supply curve for oatmeal is also provided to you.

$$\text{Alex: } P = 20 - Q^D$$

$$\text{Zander: } Q^D = 40 - 2P$$

$$\text{Clark: } Q^D = 20 - 4P$$

$$\text{Supply: } Q^S = (3/2)P - 12$$

Given the above information and holding everything else constant, what is the equilibrium price and quantity of oatmeal?

- a.) $Q = 12$ units, $P = \$16$
 - b.) $Q = 12$ units, $P = \$8$
 - c.) $Q = 8$ units, $P = \$40/3$
 - d.) $Q = 8$ units, $P = \$16$
30. Consider the market for corn that can be described the following supply and demand curves where P is the price per bushel of corn and Q is the quantity of bushels of corn:

$$\text{Supply: } Q = P$$

$$\text{Demand: } Q = 20 - P$$

The corn-growers union has successfully lobbied the government to create a price support for corn of \$13 per bushel. Compared to the initial market equilibrium before the imposition of this price support, the quantity of corn produced in this market with the price support increases by _____ and the cost to the government, excluding any storage costs, is equal to _____.

- a.) 3 bushels, \$39
- b.) 3 bushels, \$78
- c.) 6 bushels, \$78
- d.) 6 bushels, \$18

Question #	Correct Answer
1	D
2	D
3	A
4	A
5	C
6	C
7	A
8	D
9	C
10	C
11	C
12	B
13	C
14	D
15	B
16	B
17	B
18	C
19	A
20	D
21	C
22	C
23	B
24	B
25	B
26	B
27	C

Question #	Correct Answer
28	D
29	A
30	B