

Principles of Economics I
Midterm Exam 1

10/22/2015

Last Name: _____ First Name: _____.

SID: _____.

TA/Section: _____.

Do not start the exam until instructed to do so.

Please select only one answer.

1. Ashley eats two bananas during a particular day. The marginal benefit she enjoys from eating the second banana

- a) can be thought of as the total benefit Ashley enjoys by eating two bananas minus the total benefit she would have enjoyed by eating just the first banana.
- b) determines Ashley's marginal cost of the first and second bananas.
- c) does not depend on how many bananas Ashley has already eaten.
- d) cannot be determined unless we know how much she paid for the bananas.

2. If macaroni and cheese is an inferior good, then an increase in

- a) the price will cause the demand curve for macaroni and cheese to shift to the left.
- b) the price will cause the demand curve for macaroni and cheese to shift to the right.
- c) a consumer's income will cause the demand curve for macaroni and cheese to shift to the left.
- d) a consumer's income will cause the demand curve for macaroni and cheese to shift to the right.

3. Using the midpoint method, the price elasticity of demand for a good is computed to be approximately 0.75. Which of the following events is consistent with a 10 percent decrease in the quantity of the good demanded?

- a) A 7.5 increase in the price of the good.
- b) A 13.33 percent increase in the price of the good.
- c) An increase in the price of the good from \$7.50 to \$10.
- d) An increase in the price of the good from \$10 to \$17.50.

4. Economic models

- a) are people who act out the behavior of firms and households so that economists can study this behavior.
- b) are usually detailed replications of reality.
- c) incorporate simplifying assumptions that often contradict reality, but also help economists better understand reality.
- d) are useful to researchers but not to teachers because economic models omit many details of the real-world economy.

5. A bagel shop sells fresh baked bagels from 5 a.m. until 7 p.m. every day. The shop does not sell day-old bagels, so all unsold bagels are thrown away at 7 p.m. each day. The cost of making and selling a dozen bagels is \$1.00; there are no costs associated with throwing bagels away. If the manager has 8 dozen bagels left at 6:30 p.m. on a particular day, which of the following alternatives is most attractive?

- a) Lower the price of the remaining bagels, even if the price falls below \$1.00 per dozen.
- b) Lower the price of the remaining bagels, but under no circumstances should the price fall below \$1.00 per dozen.
- c) Throw the bagels away and produce 8 fewer dozen bagels tomorrow.
- d) Starting tomorrow, lower the price on all bagels so they will all be sold earlier in the day.

6. Consider the table below.

Price	Quantity Demanded	Quantity Supplied
\$10	10	60
\$8	20	45
\$6	30	30
\$4	40	15
\$2	50	0

If the price were \$4, a

- a) surplus of 15 units would exist, and price would tend to fall.
- b) shortage of 25 units would exist, and price would tend to rise.
- c) surplus of 25 units would exist, and price would tend to fall.
- d) shortage of 40 units would exist, and price would tend to rise.

7. Last month, sellers of good Y took in \$100 in total revenue on sales of 50 units of good Y. This month sellers of good Y raised their price and took in \$120 in total revenue on sales of 40 units of good Y. At the same time, the price of good X stayed the same, but sales of good X increased from 20 units to 40 units. We can conclude that goods X and Y are

- a) substitutes, and have a cross-price elasticity of 0.60.
- b) complements, and have a cross-price elasticity of -0.60.
- c) substitutes, and have a cross-price elasticity of 1.67.
- d) complements, and have a cross-price elasticity of -1.67.

8. In a particular country in 1998, the average worker needed to work 25 hours to produce 40 units of output. In that same country in 2008, the average worker needed to work 40 hours to produce 68 units of output. In that country, the productivity of the average worker

- a) decreased by 1.7 percent between 1998 and 2008.
- b) remained unchanged between 1998 and 2008.
- c) increased by 4.75 percent between 1998 and 2008.
- d) increased by 6.25 percent between 1998 and 2008.

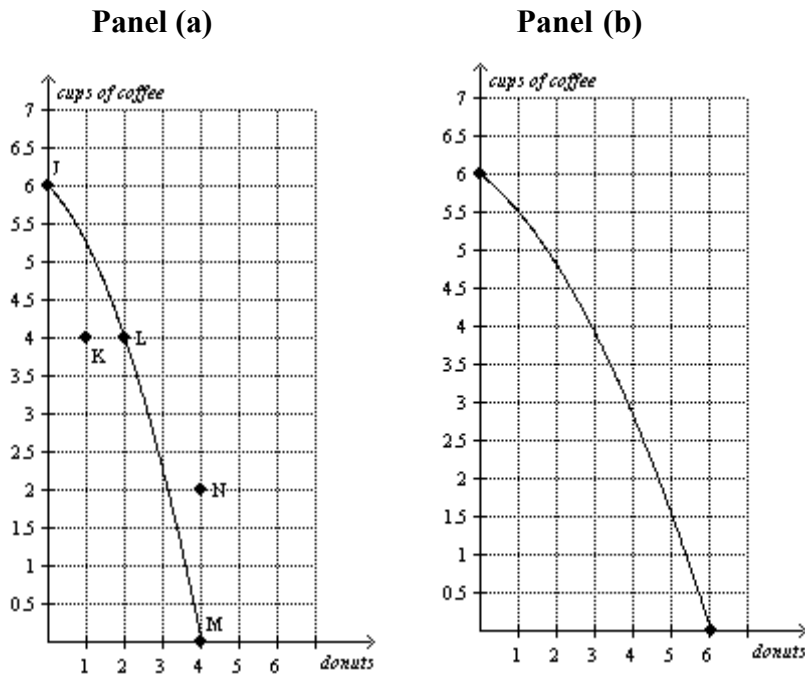
9. Assume that England and Spain can switch between producing cheese and producing bread at a constant rate.

	Labor Hours Needed to Make 1 Unit of		Number of Units Produced in 24 Hours	
	Cheese	Bread	Cheese	Bread
England	2	3	12	8
Spain	3	6	8	4

Which of the following combinations of cheese and bread could Spain produce in 24 hours?

- a) 4 units of cheese and 3 units of bread.
- b) 6 units of cheese and 1 units of bread.
- c) 7 units of cheese and 1.5 units of bread.
- d) 3 units of cheese and 3 units of bread.

10. Consider the figures below.



Refer to Panel (a) and Panel (b). A shift of the economy's production possibilities frontier from Panel (a) to Panel (b) could be caused by

- a) unemployment.
- b) an improvement in donut production technology.
- c) an improvement in coffee production technology.
- d) an improvement in both donut and coffee production technology.

11. Suppose the income elasticity of demand is -0.5 for good X. This implies that a 5% decrease in income will cause the quantity demanded of good X to

- a) increase by 2.5%, and X is an inferior good.
- b) decrease by 2.5% and X is a normal good.
- c) increase by 10% and X is an inferior good.
- d) decrease by 10% and X is a normal good.

12. When the "invisible hand" guides economic activity, prices of products reflect
- a) only the values that society places on those products.
 - b) only the costs to society of producing those products.
 - c) both the values that society places on those products and the costs to society of producing those products.
 - d) none of the above; when the "invisible hand" guides economic activity, prices of products are set by the government in a manner that is thought to be "fair."

13. Which of the following is *not* an example of the principle that trade can make everyone better off?
- a) Americans buy tube socks from China.
 - b) Residents of Maine drink orange juice from Florida.
 - c) A homeowner hires the kid next door to mow the lawn.
 - d) All of the above are examples of the principle that trade can make everyone better off.

14. The demand schedule below pertains to sandwiches demanded per week.

	Harry's Quantity Demanded	Darby's Quantity Demanded	Jake's Quantity Demanded
Price			
\$3	3	4	3
\$5	1	2	x

Suppose $x = 1$. Then the slope of the market demand curve is

- a) $1/3$
- b) -3
- c) 3
- d) $-1/3$

15. When constructing a production possibilities frontier, which of the following assumptions is *not* made?

- a) The economy produces only two goods or two types of goods.
- b) Firms produce goods using factors of production.
- c) The technology available to firms is given.
- d) The quantities of the factors of production that are available are increasing over the relevant time period.

16. The table below shows one set of production possibilities. What is the opportunity cost of an increase in the production of wheat from 700 bushels to 1300 bushels?

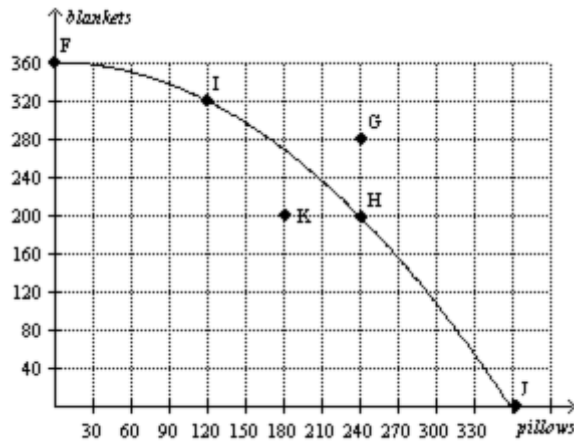
Corn (in bushels)	Wheat (in bushels)
2000	0
1600	700
1200	1300
800	1800
400	2200
0	2500

- a) 800 bushels of corn
- b) 600 bushels of corn
- c) 400 bushels of corn
- d) 400 bushels of wheat

17. Suppose that a worker in Boatland can produce either 5 units of wheat or 25 units of fish per year, and a worker in Farmland can produce either 25 units of wheat or 5 units of fish per year. There are 30 workers in each country. No trade occurs between the two countries. Boatland produces and consumes 75 units of wheat and 375 units of fish per year while Farmland produces and consumes 375 units of wheat and 75 units of fish per year. If trade were to occur, Boatland would trade 90 units of fish to Farmland in exchange for 80 units of wheat. If Boatland now completely specializes in fish production, how many units of fish could it now consume along with the 80 units of imported wheat?

- a) 490 units
- b) 500 units
- c) 610 units
- d) 660 units

18. Consider the figure below.



- A movement from point H to point K could be caused by
- unemployment.
 - a decrease in society's preference for pillows.
 - fewer resources available for production of pillows.
 - All of the above are correct.

19. Good X and good Y are substitutes. If the price of good Y increases, then the

- demand for good X will decrease.
- quantity demanded of good X will decrease.
- demand for good X will increase.
- quantity demanded of good X will increase.

20. If the price elasticity of supply is 1.5, and a price increase led to a 3% increase in quantity supplied, then the price increase is about

- 0.2%.
- 0.5%.
- 2.0%.
- 4.5%.

- 21.** Market failure can be caused by
- a) low consumer demand.
 - b) equilibrium prices.
 - c) externalities and market power.
 - d) high prices and foreign competition.

22. Assume that England and Holland can switch between producing milk and oats at a constant rate.

	Number of Units Produced in an Hour	
	Milk	Oats
England	10	4
Holland	8	6

We could use the information in the table to draw a production possibilities frontier for England and a second production possibilities frontier for Holland. If we were to do this, measuring milk along the horizontal axis, then

- a) the slope of England's production possibilities frontier would be $-10/4$ and the slope of Holland's production possibilities frontier would be $-4/3$.
- b) the slope of England's production possibilities frontier would be $-4/10$ and the slope of Holland's production possibilities frontier would be $-3/4$.
- c) the slope of England's production possibilities frontier would be $10/4$ and the slope of Holland's production possibilities frontier would be $4/3$.
- d) the slope of England's production possibilities frontier would be $4/10$ and the slope of Holland's production possibilities frontier would be $3/4$.

23. How does total revenue change as one moves downward and to the right along a linear demand curve?

- a) It always increases.
- b) It always decreases.
- c) It first increases, then decreases.
- d) It is unaffected by a movement along the demand curve.

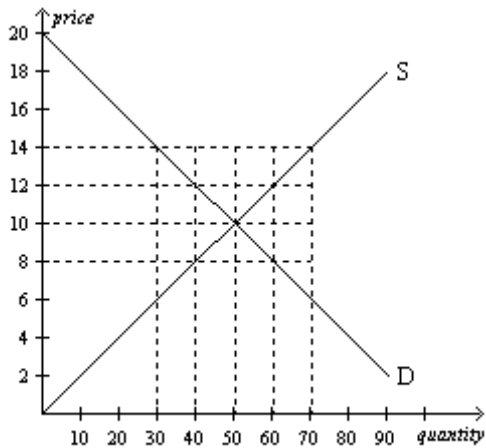
24. Consider the table below.

	Labor Hours Needed to Produce	
	1 Dozen Eggs	1 Pound Ham
Denmark	10	8
Finland	6	4

At which of the following prices, if any, could both Denmark and Finland gain from trade?

- a) 2/3 pounds of ham per dozen eggs.
- b) 1 pound of ham per dozen eggs.
- c) 1.4 pounds of ham per dozen eggs.
- d) None of the above are correct.

25. Consider the figure below.



If there is currently a shortage of 20 units of the good, then the law of

- a) demand predicts that the price will rise by \$2 to eliminate the shortage.
- b) supply predicts that the price will rise by \$2 to eliminate the shortage.
- c) supply and demand predicts that the price will rise by \$2 to eliminate the shortage.
- d) supply and demand predicts that the price will fall by \$2 to eliminate the shortage.