

## Midterm Exam 1

Instructions: Answer each of the questions. Print your name and student number clearly on the answer sheet. Fill in the bubbles corresponding to your student number, leaving the top box blank (or inserting a dash there) and filling in the "0" bubble in the top row.

1. My version of the quiz is
  - a. Version 1 – Yellow
  - b. Version 2 – Purple
  - c. Version 3 – Green
  - d. Version 4—Pink
  - e. Version 5—White
  
2. If the demand for potato chips decreases, the equilibrium price
  - a. increases and the equilibrium quantity increases.
  - b. decreases and the equilibrium quantity increases.
  - c. decreases and the equilibrium quantity decreases.
  - d. increases and the equilibrium quantity decreases.
  
3. A decrease in the wage rate paid to workers in the automobile industry will \_\_\_\_\_ automobiles and as a result the equilibrium quantity of automobiles will \_\_\_\_\_.
  - a. increase the supply of; decrease
  - b. increase the supply of; increase
  - c. cause no change in the market for; not change
  - d. increase the demand for; decrease
  
4. A decrease in consumers' incomes has decreased the demand for tablets. At the same time, the tablet industry has enjoyed unprecedented increases in technology growth and decreases in costs of raw materials. What can we say about the equilibrium price and quantity in the tablet market as a result of these two changes?
  - a. price will rise and quantity will fall
  - b. price will fall, but the effect on equilibrium quantity is unknown
  - c. price will fall and quantity will fall
  - d. price will rise, but the effect on equilibrium quantity is unknown
  
5. You observe that the equilibrium price of shampoo has increased and the quantity has decreased. Ceteris paribus, this could result from
  - a. A decrease in the demand for shampoo.
  - b. An increase in the supply of shampoo.
  - c. A decrease in the supply of shampoo.
  - d. An increase in the demand for shampoo.
  
6. Suppose that when the price of roses increases, the demand for tulips increases. This indicates that these two goods are:
  - a. unrelated goods.
  - b. inferior goods.
  - c. substitute goods.
  - d. complement goods.
  
7. Ceteris paribus, if during an unusually cold winter the demand for hot chocolate increases, the price of a cup of hot chocolate
  - a. decreases and the quantity supplied increases.
  - b. increases and the supply of hot chocolate increases.
  - c. increases and the quantity supplied increases.
  - d. decreases and the supply of hot chocolate decreases.

8. An increase in consumer fears about heart attacks has decreased the demand for donuts. At the same time, donut bakers are facing increases in costs due to the rising price of sugar, a key ingredient in making donuts. What can we say about the equilibrium price and quantity in the donut market as a result of these two changes?

- a. price will rise and quantity will fall
- b. quantity will fall, but the effect on equilibrium price is unknown
- c. price will fall and quantity will fall
- d. quantity will rise, but the effect on equilibrium price is unknown

9. “The quantity demanded of Sprite has increased,” Nicole correctly tells Kevin. The best explanation for this is

- a. the price of Sierra Mist has decreased.
- b. Sprite’s costs have increased.
- c. the price of Sprite decreased.
- d. both a and b are possible.

10. The market for snowmobiles is unregulated and is presently characterized by excess demand. You accurately predict that

- a. price will increase, the quantity demanded will fall and the quantity supplied will rise.
- b. price will increase, the quantity demanded will rise and the quantity supplied will fall.
- c. price will decrease, the quantity demanded will rise and the quantity supplied will fall.
- d. price will decrease, the quantity demanded will fall and the quantity supplied will rise.

11. Joanna is thinking about starting a small business cutting hair in her garage. She tells you that if she makes a financial investment of \$5,000 and works full-time for a year, she can earn \$10,000 per year. Given your recent studies in Economics, what advice would you give her?

- a. The gain of \$10,000 exceeds her investment of \$5,000, so she should invest.
- b. The market for cutting hair is slow , so she should not invest.
- c. If the value of investing her \$5,000 in the next best project is less than \$10,000, she should invest.
- d. If the sunk cost of investing her \$5,000 is less than \$10,000, she should invest.

12. Your friend Mark is going to a movie theatre this afternoon. He buys a soda with “free refills” for \$6. Using your knowledge of Economics, how many sodas should he drink?

- a. Drink until you have consumed \$6 worth of soda.
- b. Drink until you have consumed more than \$6 worth of soda.
- c. Drink as long as the marginal cost of the last soda exceeds the marginal benefit of that soda.
- d. Drink as long as the marginal benefit of the last soda exceeds the marginal cost of that soda.

13. Kathy’s job is relocating her to California and she needs to sell her house in Bozeman. She has paid \$75,000 to install new tile in the kitchen in the last year. In its current state, she could sell her home for \$300,000. However, if she upgraded the living room, she could sell it for \$350,000. It can be upgraded for \$35,000. What should she do?

- a. She should upgrade the kitchen since the Total Cost will exceed the Total Benefit.
- b. She should not upgrade the kitchen since she already spent \$75,000 to install new tile in the kitchen and the Total Cost will exceed the Total Benefit.
- c. She should not sell her house at all since she upgraded it recently.
- d. She should upgrade her house since the marginal benefit of the upgrade will exceed the marginal cost.

14.

Country	Production per Year	
China	6 Washing Machines	15 Dishwashers
Malaysia	4 Washing Machines	12 Dishwashers

The table above shows the production possibilities frontier for China and Malaysia, which each produce washing machines and dishwashers. Ceteris paribus, \_\_\_\_\_ has absolute advantage in washing machines; \_\_\_\_\_ has comparative advantage in washing machines; \_\_\_\_\_ has comparative advantage in dishwashers.

- a. China; China; China.
- b. China; Malaysia; China.
- c. China; China; Malaysia.
- d. Malaysia; China; China.

15.

Country	Production per Year	
France	10 Wine (gallons)	20 Waffles
Belgium	2 Wine (gallons)	22 Waffles

The above table shows the production possibilities frontier for two countries, Belgium and France, which produce wine and waffles. Which of the following are potential trades that would be feasible and make both countries better off?

- a. Belgium trades away 11 Waffles for 5 gallons of Wine
- b. Belgium trades away 22 Waffles for 1 gallon of Wine.
- c. France trades away 2 Waffles for ½ a gallon of Wine.
- d. Belgium trades away 2 gallons of Wine for 8 Waffles.

16.

Country	Production per Year	
France	10 Wine (gallons)	20 Waffles
Belgium	2 Wine (gallons)	22 Waffles

The above table shows the production possibilities frontier for two countries, Belgium and France, which produce wine and waffles. If the two were to trade based on their comparative advantages, who would be worse off?

- a. Waffle producers in France.
- b. Waffle producers in Belgium.
- c. Wine producers in France.
- d. Everyone will be better off.

17.

Country	To produce 1 watch	To produce 1 suit
Poland	Labor of 10 workers	Labor of 9 workers
Switzerland	Labor of 12 workers	Labor of 8 workers

The above table shows how many workers it takes to produce one watch and one suit, respectively. From this table, we can conclude that \_\_\_\_\_ has the comparative advantage in watches, and \_\_\_\_\_ has an absolute advantage in suit production.

- a. Poland; Switzerland.
- b. Switzerland; Poland.
- c. Poland; Poland.
- d. Switzerland; Switzerland.

18.

Maximum annual output options	Coconuts	Pineapples
A	100	0
B	80	30
C	60	50
D	40	60
E	20	65
F	0	67

The inhabitants of Fiji collect coconuts and pineapples according to the production possibilities frontier above. From the PPF, we can see that the opportunity cost of increasing from 60 to 80 coconuts is \_\_\_\_\_ the opportunity cost of increasing from 20 to 40 coconuts. This means there are \_\_\_\_\_ opportunity costs in coconuts.

- a. Greater than; increasing.
- b. Less than; decreasing.
- c. Equal to; constant.
- d. None of the above.

19.

Maximum annual output options	Coconuts	Pineapples
A	100	0
B	80	30
C	60	50
D	40	60
E	20	65
F	0	67

The inhabitants of Fiji collect coconuts and pineapples according to the production possibilities frontier above. Using the above PPF, you can determine that the production pair of 50 coconuts and 70 pineapples is:

- a. Efficient and attainable.
- b. Inefficient and attainable.
- c. Unattainable.
- d. Maximizing the opportunity cost.

20. Determine the flaw in the following statement:

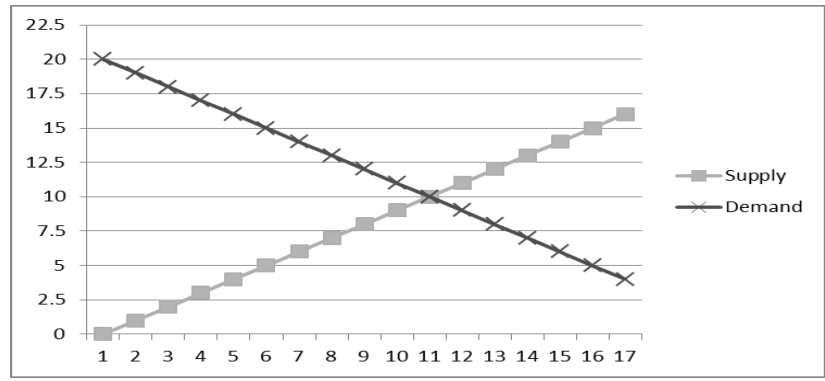
“An economics reporter states that China is increasing its productivity very rapidly in all industries. He claims that this productivity advance is so rapid that output from China in these industries will soon exceed that of India and, as a result, India will no longer benefit from trade with the China.”

- a. Even if China has an absolute advantage in all industries, India will have a comparative advantage in some and there will be gains to trade.
- b. China and India already were not gaining from trade.
- c. China is not operating at an unattainable point on its PPF, and can no longer increase production.
- d. The above statement is not flawed.

21. A representative of the International Cycling Union recently made the following statement:  
 “Approximately 10 professional cyclists were accused of doping during the 2012 season, leading up to the Tour de France. Even though the cases haven’t been proven, these 10 athletes should be permanently banned from the sport to fully showcase cycling’s anti-doping sentiments.”

Which of the following statements correctly points out the normative and positive statements in the quote?

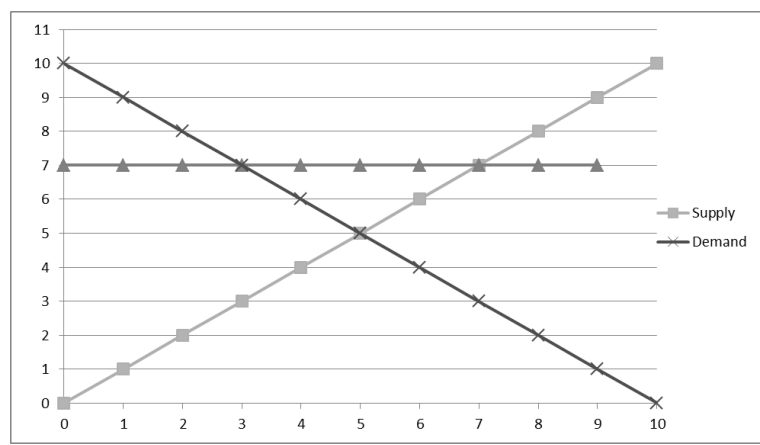
- a. Sentence 1 is normative. Sentence 2 is positive.
- b. Sentence 1 is positive. Sentence 2 is normative.
- c. Both sentences 1 and 2 are normative.
- d. Both sentences 1 and 2 are positive.



22.

The above diagram depicts the equilibrium in the market for Green Bay Packer t-shirts. Assume there is a price **floor** set at \$12/shirt. Which of the following would result from the floor?

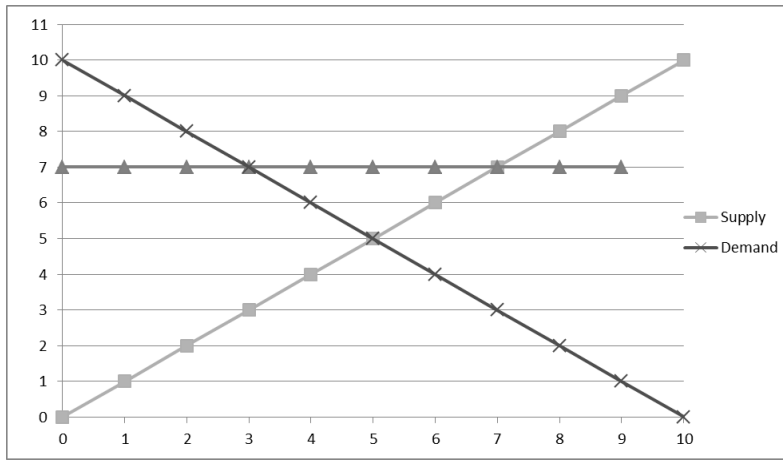
- a. There will be a shortage of t-shirts.
- b. There will be a surplus of t-shirts.
- c. Demand for t-shirts will shift inward.
- d. The price floor will not affect the equilibrium price and quantity of t-shirts.



23.

The above diagram depicts equilibrium in the market for sand. Now, a price **ceiling** is set at \$7/lb. This will result in a

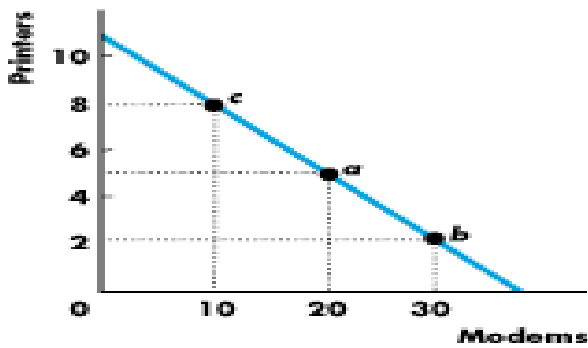
- a. Shortage of 4 lbs of sand.
- b. Surplus of 4 lbs of sand.
- c. No shortage or surplus.
- d. Surplus of 7 lbs of sand.



24.

The above diagram depicts the equilibrium in the market for sand. What is the resulting deadweight loss from a price floor set at \$7/lb, when compared to the equilibrium price and quantity?

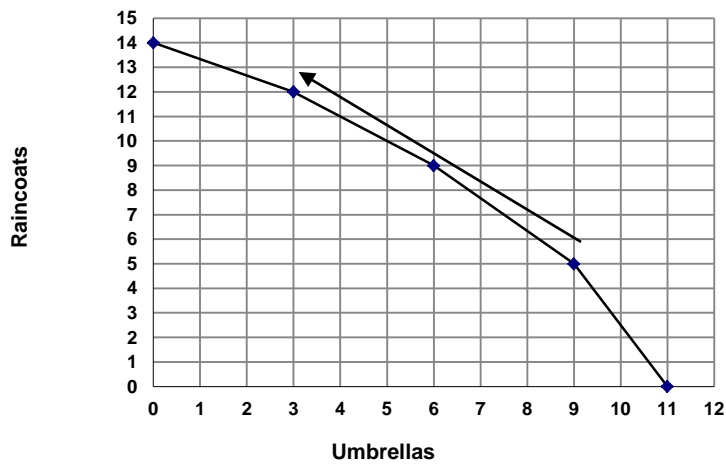
- a.  $\frac{1}{2} * 4 * 2$
- b.  $\frac{1}{2} * 3 * 3$
- c.  $4 * 3$
- d.  $4 * 2$



25.

Above is a production possibilities frontier for Khutch Computer Store's production of Printers and Modems. If they move from point a to point c, the opportunity cost per printer:

- a. Increases
- b. Decreases
- c. Stays the same
- d. Is zero.



26. Above is the production possibilities frontier for Stormclouds, Inc. Moving along the PPF in the direction of the arrow in the figure, the opportunity cost of going from 5 to 9 raincoats is \_\_\_\_\_ the opportunity cost of increasing production from 9 to 13 raincoats:
- Greater than
  - Less than
  - the same as
  - Both a and b are correct.

27. Many people wish to live in the beautiful town of Mountainville, but they don't like the rents. In its current market equilibrium, Mountainville has 10,000 rental apartments at an equilibrium price of \$2,000 per month. The voters of Mountainville impose rent controls at the price of \$1,000 per month and the number of rental apartments available in the market shrinks to 6,000. Compared to the equilibrium, which of the following is true:
- Producer surplus has decreased, and there is **no** deadweight loss.
  - Producer surplus is unchanged, and there is **no** deadweight loss.
  - Producer surplus has decreased, and there is a deadweight loss.
  - Producer surplus is unchanged and there is a deadweight loss.

28.

Price	Quantity Demanded	Quantity Supplied
\$6	10,000	0
\$12	8,000	3,000
\$18	6,000	6,000
\$24	4,000	9,000
\$30	2,000	12,000
\$36	0	15,000

The table above shows information on demand and supply for boxes of 1 dozen silk napkins. The lobbyists for the silk napkin producers persuade the government to establish a price floor of \$24 per box. Before the price floor the equilibrium price was \_\_\_\_\_ per box and after the price floor, there is a \_\_\_\_\_ of 5,000 boxes.

- \$18; shortage.
- \$18; surplus.
- \$24; shortage.
- \$24; surplus.



29.

Price	Quantity Demanded	Quantity Supplied
\$6	10,000	0
\$12	8,000	3,000
\$18	6,000	6,000
\$24	4,000	9,000
\$30	2,000	12,000
\$36	0	15,000

The table above shows information on demand and supply for boxes of 1 dozen silk napkins. Last year, the lobbyists for the silk napkin producers persuaded the government to establish a price floor of \$24 per box. Now, the price floor is removed. Which of the following statements are **true** regarding the changes in the market between the price floor and the removal of the price floor?

- I. There is an increase in consumer surplus.
  - II. There is a deadweight loss greater than zero.
  - III. The price and quantity restore to the original market equilibrium.
- a. I only.
  - b. I and II only.
  - c. I, II, and III.
  - d. I and III.

30.

Quantity (hours)	Total Benefit	Marginal Cost
0	14	0
1	25	3
2	32	7
3	34	12

Mike is an avid mountain biker. The above table shows his hours of mountain biking, his total benefit associated by total hours of mountain biking, as well as his marginal cost of each additional hour of mountain biking. Using the information in the table, for how many hours should Mike ride? (Hint: Add a Marginal Benefit Column calculated from Total Benefit.)

- a. 0
- b. 1
- c. 2
- d. 3

31. Relative to a person who earns minimum wage (\$7.65/hr), a person who earns \$30 per hour has

- a. no opportunity costs at all.
- b. a lower opportunity cost of taking a day off.
- c. a higher opportunity cost of driving farther to work.
- d. the same opportunity cost of spending time on leisure activities.

32. Karl has a comparative advantage in doing dishes when compared to his siblings if he

- a. can wash dishes faster than all of his siblings.
- b. has an absolute advantage in washing dishes.
- c. always makes the dishes sparkle.
- d. has a lower opportunity cost for doing dish than his siblings.

33. Consumers' incomes have decreased due to a large increase in income taxes in Montana. How does this change the market for magazine subscriptions?

- a. If magazine subscriptions are a normal good, demand will increase.
- b. If magazine subscriptions are an inferior good, demand will increase.
- c. If magazine subscriptions are an inferior good, supply will increase.
- d. If magazine subscriptions are a normal good, supply will increase.

34. Which of the following statements is **false**?

- a. Microeconomics studies the choices individuals and households make.
- b. A positive statement is based on facts.
- c. The Law of Supply states that there is a positive relationship between price and quantity supplied.
- d. A normal good is defined as a good where an increase in the price of that good increases the supply for that good.

## ANSWERS

- 1 A
- 2 C
- 3 B
- 4 B
- 5 C
- 6 C
- 7 C
- 8 B
- 9 C
- 10 A
- 11 C
- 12 D
- 13 D
- 14 C
- 15 A
- 16 A
- 17 A
- 18 A
- 19 C
- 20 A
- 21 B
- 22 B
- 23 C
- 24 A
- 25 C
- 26 B
- 27 C
- 28 B
- 29 D
- 30 C
- 31 C
- 32 D
- 33 B
- 34 D