

Print Your Name: \_\_\_\_\_ Your Section #: \_\_\_\_\_

**Please note:** Unless otherwise indicated by the wording of the question, assume that

-demand curves are downward sloping

-supply curves are upward sloping

-if the marginal benefit for a unit equals the marginal cost, then the transaction takes place.

**True-False Questions:** On your Scantron answer sheet, answer A for "True" and B for "False".

1. When a market is in equilibrium, the supply of an additional unit of the good will not provide consumers additional marginal benefit.

F

2. The price of MSG, an ingredient in ramen, falls. Simultaneously, consumers' incomes fall. If ramen is an inferior good, then the new equilibrium price of ramen must be higher than the old equilibrium price.

F

3. If one of the factors that determines demand other than the good's own price changes, then the demand curve for that good will shift.

T

4. Consider an economy that produces two goods: wine and bread. When there is an improvement in technology in the production of wine, holding all else constant, society faces larger opportunity costs from shifting productive resources from producing bread to wine.

T

F

5. The law of supply implies that when price is lower, the quantity supplied is greater.

F

6. An individual demand curve is a graph that plots the market price of an individual product at different points in time.

F

7. Jean is trying to decide whether to buy another shirt from an online retailer. She should buy the shirt if the marginal benefit of the shirt is less than the price of the shirt.

F

8. Suppose that the demand curve for a company's product is inelastic between two points where it is considering operating. A revenue-maximizing producer should choose to produce at the point with the lower quantity demanded.

F T

9. Total revenue is maximized when the price elasticity of supply is equal to -1.

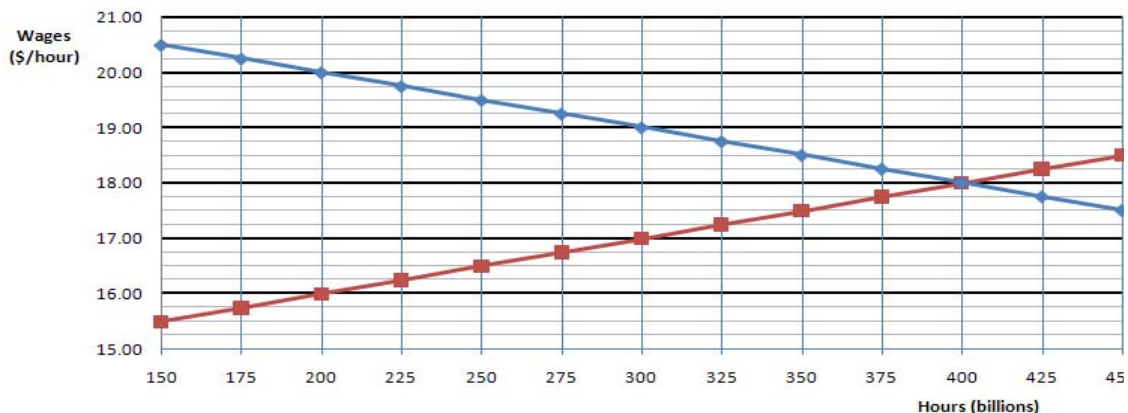
T F

10. The more inelastic the demand relative to supply, the greater the burden imposed on consumers by a tax.

T

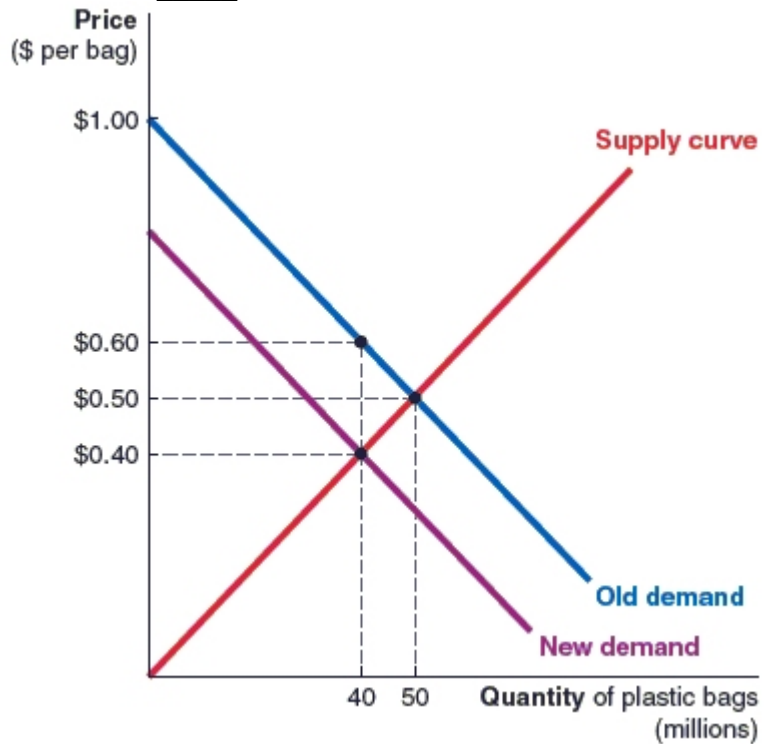
**Multiple-Choice Questions:** On your Scantron answer sheet, select the best answer.

11. Suppose the U.S. government needs \$750 billion to bail out its ailing financial institutions. It decides to generate the revenue for the bail out through a tax on the U.S. labor force, whereby workers will be taxed for each hour of labor that they supply. Given the demand curve for labor and the pre-tax labor supply curve below, what tax per hour of labor will generate exactly \$750 billion to fund the “bail out”?



- A) 1  
B) 2  
C) 2.5  
D) 3  
E) 4

12. In the market for plastic bags shown here, the original equilibrium price is 50 cents per bag. In an effort to reduce plastics usage, a tax is then placed on the buyers of plastic bags. The burden of the tax on buyers is \_\_\_\_ % and the burden of the tax on sellers is \_\_\_\_ %.



- A) 60, 40
- B) 20, 80
- C) 30, 70
- D) 70, 30
- E) 50, 50

13. Zach spends a day working on a term paper for his macroeconomics class. He has a job paying him \$80 daily, but if he had not worked on the paper he would have spent the whole day in Disneyland with friends instead of going to work. What is the opportunity cost to Zach of the day he spent writing his paper?
- A) The value he would have received from going to Disneyland with friends or the \$80 he could have earned at work, whichever is higher - we would need more information to determine this.
  - B) The value he would have received from going to Disneyland with friends or the \$80 he could have earned at work, whichever is lower - we would need more information to determine this.
  - C) The \$80 he could have earned at work plus the value he would have received from going to Disneyland with friends.
  - D) The \$80 he could have earned at work.
  - E) The value he would have received from going to Disneyland with friends.
14. **During the Great Recession of 2007-2009, unemployment shot up and a lot of people lost their jobs. All over the United States, people worried about job security. Which of the following do you think happened as a result of the Great Recession?**
- (i) Consumers ate meals at home less often.**
  - (ii) Consumers purchased fewer higher-end vehicles.**
  - (iii) Purchases of new housing went down.**
  - (iv) Consumers took fewer vacations outside the United States.**
- A) i, ii only
  - B) iii, iv only
  - C) i, iii, iv only
  - D) ii, iii, iv only
  - E) i, ii, iii, iv are all correct
15. A normal good is:
- A) a good for which higher income causes an increase in demand.
  - B) a good which is normally purchased by many consumers.
  - C) a good which is only purchased by high-income consumers.
  - D) a good which is normally purchased by low-income consumers.
  - E) a good for which higher income causes a decrease in demand.

16. Gary is willing to pay \$700 for a new iPad. Apple (the producer of iPads) is selling a new iPad for \$600. It costs Apple \$400 to produce this iPad. How much economic surplus does Gary receive if he purchases this iPad?

- A) \$700
- B) \$600
- C) \$300
- D) \$200
- E) \$100

17. Alan Patel is a college student living alone in a campus apartment. He finished cooking dinner when his friends text him to join them at the dining hall on campus for dinner. He now has to decide whether to eat the dinner he prepared or walk to campus to meet his friends at the dining hall. Alan should consider all the following costs when making this decision EXCEPT the

- A) time it will take to go meet his friends and walk back.
- B) amount of money he will spend at the dining hall.
- C) money spent on the groceries he used to cook dinner.
- D) value he places on dining hall food.
- E) value he places on not eating alone.

18. How would the supply curve for clothing be affected if the price of cotton suddenly decreases?

- A) The supply curve for clothing would shift to the right.
- B) The supply curve for clothing would shift to the left.
- C) The supply curve for clothing would be unaffected.
- D) The supply curve for clothing might shift to the right or remain unaffected, more information is needed.
- E) The supply curve for clothing might shift to the left or remain unaffected, more information is needed.

19. Suppose the quantity demanded for apples is 150 bushels when the price is \$22 per bushel. When the price rises to \$28 per bushel, the quantity demanded drops to 100 bushels of apples. Using the midpoint formula, what is the price elasticity of demand when the price rises from \$22 per bushel to \$28 per bushel?

- A) -2/5
- B) -3/5
- C) -2/3
- D) -5/3
- E) -1

20. In the market for new textbooks, which of the following changes to price and quantity of textbooks sold is not possible?

- A) Rising student income causes price and quantity to rise.
- B) A fire at one of the large bookstore causes price to rise and quantity to fall.
- C) Falling production costs cause price and quantity to fall.**
- D) Firms offer a lower price to get students to buy new textbooks instead of used textbooks, and quantity demanded rises.
- E) Higher tuition and more expensive paper cause price to stay the same and quantity to fall.

21. Suppose there are 100 Type A consumers and 500 Type B consumers in the gasoline market. The individual demand for each type of consumer, as well as the market supply, is shown in the table below. What is the equilibrium price?

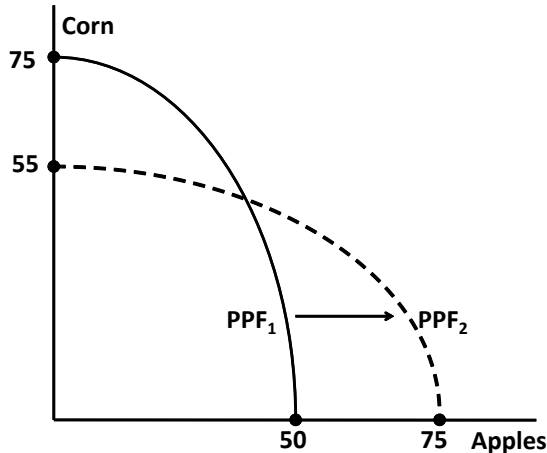
Price (\$ per barrel)	Demand for Gasoline (barrels)		Supply of Gasoline (barrels)
	Type A	Type B	
4	6	8	0
6	5	7	1,000
8	4	6	1,300
10	3	5	1,700
12	2	4	2,200
14	1	3	2,800
16	0	2	3,500
18	0	1	4,300

Total demand for A  
Total demand for B  
Multiple # consumers type  
and demand type  
Total demand A+B

- A) 4
- B) 6
- C) 8
- D) 10
- E) 12**

22. If both supply increases and demand decreases, what happens to the equilibrium price and quantity?
- A) Equilibrium price must fall and equilibrium quantity must rise
  - B) Equilibrium price could rise, fall or remain the same; equilibrium quantity must fall
  - C) Equilibrium price could rise, fall or remain the same; equilibrium quantity must rise
  - D) Equilibrium price must fall; equilibrium quantity could rise, fall, or remain the same
  - E) Equilibrium price must rise; equilibrium quantity could rise, fall, or remain the same
23. The market for UGG Boots (downward sloping demand and upward sloping supply) is currently in equilibrium. An incredible new substitute for the UGG Boot is invented, called the PUG Boot. What happens to the equilibrium price and quantity of UGG Boots? The equilibrium price \_\_\_\_\_ while the equilibrium quantity \_\_\_\_\_.
- A) increases; increases
  - B) decreases; decreases
  - C) increases; decreases
  - D) decreases; increases
  - E) increases; remains unchanged
24. Suppose the economy has two goods, hope and courage, and two individuals, Barack and John. Barack can produce four units of hope per hour or one unit of courage per hour. On the other hand, John can produce two units of hope per hour or three units of courage per hour. What is the opportunity cost of hope for Barack? What is the opportunity cost of producing courage for John?
- A)  $1/4$ ;  $2/3$
  - B) 2; 3
  - C) 4;  $3/2$
  - D) 1; 2
  - E) 4; 3

25. We could imagine a production possibility frontier (PPF) of a farm that only produces corn and apples. Which of the following could explain the change in the PPF shown in the figure below?



- A) The farmer takes a class in the care of apple trees.
- B) The farmer buys a new type of fertilizer that increases corn yields.
- C) The farmer buys adjacent land which can be used to grow corn and apple trees.
- D) Climate change brings about weather that is good for apple trees but bad for corn.**
- E) None of the above.

26. The cross price elasticity of demand is positive for which of the following pairs of goods?

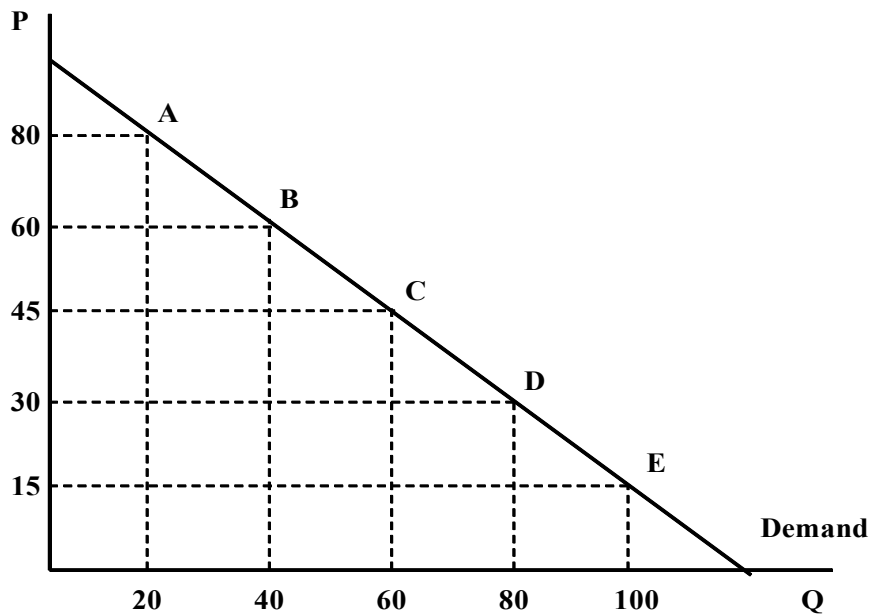
- A) Bananas and desktop computers
- B) Milk and cereal
- C) Steak and A1 steak sauce
- D) iPads and HP Touchpads**
- E) iPods and MP3 downloads**

- 27. Which of the following could cause a leftward shift of the demand curve?**

- A) An increase in the price of substitute goods.
- B) An increase in income level of consumers.**
- C) An increase in the number of consumers in the market.
- D) A decrease in the number of producers in the market.
- E) A decrease in the price of complement goods.



28. Using the following demand curve and the midpoint formula, find the elasticity of demand from points C to D.

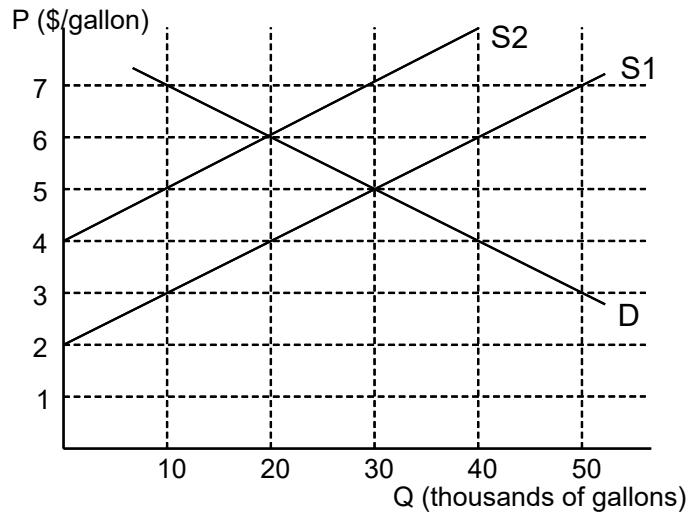


- A) -1
- B) -0.71**
- C) 1
- D) -0.45
- E) -0.21

29. **Substitutes-in-production**

- A) are always priced the same.
- B) use substitute inputs in production.
- C) means when the price of one good increases, demand for the other increases.**
- D) means that a business has alternate uses of its resources to manufacture other products using the same inputs.**
- E) allows a business to produce goods together.

30. The graph below represents supply and demand in the market for gasoline.



Which of the following could have caused supply to shift from S1 to S2?

- A) The government started paying producers of gasoline a subsidy of \$1 per gallon.
- B) The government started paying producers of gasoline a subsidy of \$2 per gallon.
- C) The government imposed a tax of \$1 per gallon on producers of gasoline.
- D) The government imposed a tax of \$1 per gallon on consumers of gasoline.
- E) The government imposed a tax of \$2 per gallon on producers of gasoline.

## **Answer Key**

1. False
2. False
3. True
4. False
5. False
6. False
7. False
8. True
9. False
10. True
11. D
12. E
13. E
14. D
15. A
16. E
17. C
18. A
19. D
20. C
21. E
22. D
23. B
24. A
25. D
26. D
27. B
28. B
29. D
30. E