

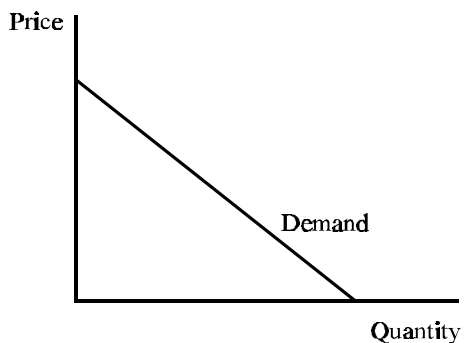
EC 301  
Prof. F. Tsoulouhas  
Sample First Exam

Name \_\_\_\_\_

SSN \_\_\_\_\_

Questions 1-20 are 4 points each. Question 21 is 5 points. Question 22 is 9 points. Question 23 is 6 points.

1. Which of the following is a positive statement?
  - A. The President of the United States ought to be elected by a direct vote of the American people rather than the Electoral College.
  - B. The economic theory of consumer behavior is founded on the assumption that consumers spend all of their income.
  - C. Tuition is too high and ought to be reduced to give an opportunity to everyone to come to college.
  - D. all of these.
  - E. none of these.
  
2. Which of the following would shift the demand curve for new text books to the right?
  - A. A fall in the price of paper used in publishing texts.
  - B. A fall in the price of equivalent used text books.
  - C. An increase in the population of students.
  - D. A fall in the price of new text books.
  
3. Which of these would occur in the sugar market following a fall in the price of a resource used to make sugar?
  - A. The demand curve would shift right.
  - B. The demand curve would shift left.
  - C. The supply curve would shift right.
  - D. The supply curve would shift left.
  
4. Assume that steak and potatoes are complements. When the price of steak goes up, the demand curve for potatoes
  - A. shifts to the left.
  - B. shifts to the right.
  - C. remains constant.
  - D. shifts to the right initially and then returns to its original position.



5. Which of the following statements about the diagram above is true?
- Demand is infinitely elastic.
  - Demand is completely inelastic.
  - Demand becomes more inelastic the lower the price.
  - Demand becomes more elastic the lower the price.
6. The assumption of transitive preferences implies indifference curves must:
- not cross one another.
  - have a positive slope.
  - be L-shaped.
  - be convex to the origin.
  - all of these are true.
7. Envision a graph with meat on the horizontal axis and vegetables on the vertical axis. A vegetarian who is neutral toward meat would have indifference curves that are:
- vertical.
  - horizontal.
  - diagonal straight lines.
  - right angles.
  - upward sloping.
8. If X and Y are perfect substitutes, which of the following assumptions about indifference curves is not satisfied?
- completeness.
  - transitivity.
  - more is preferred to less.
  - diminishing MRS.
  - none of these (all of the assumptions are satisfied).

9. Suppose that the prices of good a and good b were to suddenly double. If good a is plotted along the horizontal axis,
- the budget line will become steeper.
  - the budget line will become flatter.
  - the slope of the budget line will not change.
  - the slope of the budget line will change, but in an indeterminate way.

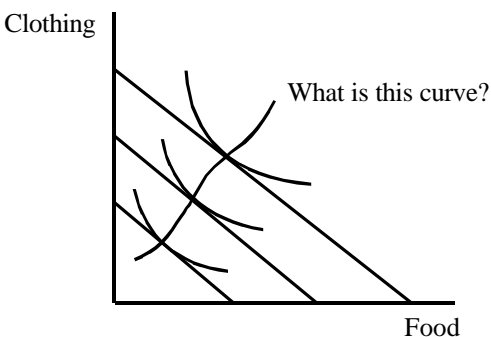
10. Consider the following three market baskets:

	Cheese	Crackers
A	5	8
B	15	6
C	10	7

If baskets A and B are on the same indifference curve and if indifference curves exhibit diminishing MRS:

- C is preferred to both A and B.
  - A and B are both preferred to C.
  - C is on the same indifference curve as A and B.
  - either C is preferred to both A and B or A AND B are both preferred to C.
11. The endpoints (horizontal and vertical intercepts) of the budget line:
- measure its slope.
  - measure the rate at which one good can be substituted for another.
  - measure the rate at which a consumer is willing to trade one good for another.
  - represent the quantity of a good that can be purchased by allocating all of the budget to that good.
  - indicate the highest level of satisfaction the consumer can achieve.
12. The price of lemonade is \$0.50; the price of popcorn is \$1.00. If Fred has maximized his utility by purchasing lemonade and popcorn, his marginal rate of substitution will be:
- 2 lemonades for each popcorn.
  - 1 lemonades for each popcorn.
  - ½ lemonade for each popcorn.
  - indeterminate unless more information on Fred's marginal utilities is provided.

13. Marginal utility measures:
- the slope of the indifference curve.
  - the additional satisfaction from one more unit of a good holding other factors constant.
  - the slope of the budget line.
  - the marginal rate of substitution.
  - none of these.
14. The income-consumption curve
- illustrates the combinations of incomes needed with various levels of consumption of a good.
  - is another name for income-demand curve.
  - illustrates the utility-maximizing combinations of goods associated with every income level.
  - shows the utility-maximizing quantity of some good (on the horizontal axis) as a function of income (on the vertical axis).



15. The curve in the diagram above is called:
- the price-consumption curve.
  - the demand curve.
  - the income-consumption curve.
  - the Engel curve.
  - none of these.
16. When the income-consumption curve has a positive slope throughout its entire length, we can conclude that
- both goods are inferior.
  - both goods are normal.
  - the good on the vertical (y) axis is inferior.
  - the good on the horizontal (x) axis is inferior.

17. For an inferior good, the income and substitution effects
- A. work together.
  - B. work against each other.
  - C. can work together or in opposition to each other depending upon their relative magnitudes.
  - D. always cancel each other.
18. A Giffen good
- A. is always the same as an inferior good.
  - B. is the special subset of inferior goods in which the substitution effect dominates the income effect.
  - C. is the special subset of inferior goods in which the income effect dominates the substitution effect.
  - D. leads to a downward sloping demand curve.
19. Assume beer is an inferior good and the price of beer falls, then the substitution effect results in the person buying \_\_\_\_\_ of the good and the income effect results in the person buying \_\_\_\_\_ of the good.
- A. more, more
  - B. more, less
  - C. less, more
  - D. less, less
20. Assume that one of two possible outcomes will follow a decision. One outcome yields a \$50 payoff and has a probability of 0.5; the other outcome has a \$100 payoff and also has a probability of 0.5. In this case the expected value is
- A. \$75.
  - B. \$50.
  - C. \$100.
  - D. \$25.
21. Farmer Brown grows wheat on his farm in Kansas, and the weather during the growing season makes this a risky venture. Over the many years that he has been in business, he has learned that rainfall patterns can be categorized as highly productive (HP) with a probability of .2, moderately productive (MP) with a probability of .6, and not productive at all (NP) with a probability of .2. With these various rainfall patterns, he has also learned that the inflation adjusted yields are -\$25,000 with NP weather, \$10,000 with MP weather, and \$50,000 with HP weather. Calculate the expected yield from growing wheat on Farmer Brown's farm. What can be learned about Brown's attitude toward risk from this problem? Explain.

22. In the field of financial management it has been observed that there is a trade-off between the rate of return that one earns on investments and the amount of risk that one must bear to earn that return.

- a. Draw a set of indifference curves between risk and return for a person that is risk averse (a person that does not like risk).
- b. Draw a set of indifference curves for a person that is risk neutral (a person that does not care about risk one way or the other).
- c. Draw a set of indifference curves for a person that likes risk.

23. The wheat market is competitive with the market supply and demand curves:

$$Q_D = 20,000,000 - 4,000,000P$$

$$Q_S = 7,000,000 + 2,500,000P$$

where  $Q_D$  and  $Q_S$  are quantity demanded and quantity supplied measured in bushels, and  $P$  = price per bushel.

- a. Determine consumer surplus at the equilibrium price and quantity.
- b. Assume that the government has imposed a price floor at \$2.25 per bushel and agrees to buy any resulting excess supply. How many bushels of wheat will the government be forced to buy? Determine consumer surplus with the price floor.