

Iowa State University  
**Economics 101**  
**Microeconomics Principles**  
Prof. Kilkenny Spring 2005

First Exam  
February 25, 2005

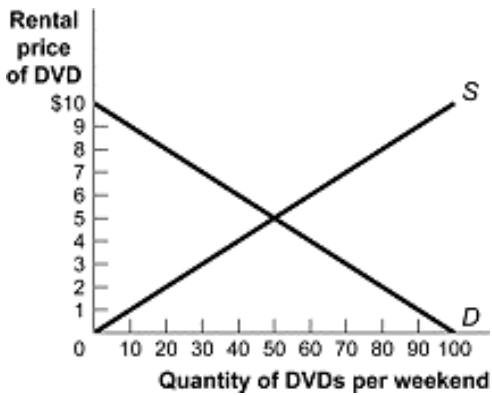
# 1

General Instructions:

1. Write **your name** here: \_\_\_\_\_
2. **USE a #2 PENCIL:** Write your **name**, Student **ID#**, Section **#** and the **exam version #** (above) on the NCS bubble/answer sheet; and blacken the corresponding circles.
3. WAIT until you are instructed to do so before you open your exam.
4. There are 28 problems on 6 pages in this exam.
5. Blacken ONE answer for each question on your NCS answer sheet.
6. Read the question carefully before answering.  
HINT: draw graphs and write out formulas to improve your focus on the correct answer.
7. **DO NOT LOOK at anyone else, much less their test.** Even if it just seems like you are looking at someone else's answers (not doing your own work), you can be graded an "F" on this exam.
8. You have 50 minutes.
9. When you are finished, turn in BOTH this exam and your NCS answer sheet.

1. The optimal quantity of an activity is the quantity at which:
  - A) marginal benefit exceeds marginal cost by the greatest amount.
  - B) total benefit exceeds total cost by the greatest amount.
  - C) marginal benefit equals marginal cost.
  - D) both b and c
  
2. Gas prices recently increased by 25%. In response, purchases of gasoline decreased by 5%. The price elasticity of demand for gas is:
  - A) 0.2
  - B) 5
  - C) 0.5
  - D) 2
  
3. If coffee and tea are substitutes in consumption, then an increase in the price of coffee will increase the demand for tea.
  - A) True
  - B) False
  
4. Although most economists agree that price floors and ceilings lead to inefficiency, governments continue to impose such price controls. A possible reason for this is:
  - A) people fear that prices will change dramatically if the price controls were removed.
  - B) it is politically expedient to enact regulations that benefit influential voting groups.
  - C) some people do benefit from such price controls.
  - D) all of the above.
  
5. By law, FICA (social security) tax is collected equally from employers and employees. In reality:
  - A) salaried, full-time employees bear almost all the burden of the tax.
  - B) employers of salaried full-time workers bear almost all the burden of the tax.
  - C) it's impossible to determine who bears the burden of a tax.
  - D) that's how it works: employers and employees each bear half the burden of the tax.
  
6. A major determinant of the price elasticity of demand is the availability of substitutes.
  - A) True
  - B) False
  
7. Suppose Congress imposes a price ceiling of \$5 per ATM transaction. If the average market-clearing price for an ATM transaction is \$2, the price ceiling will not be binding in this instance.
  - A) True
  - B) False
  
8. Which of the following would be a positive economic statement?
  - A) Government should be subject to the same rules as all other institutions.
  - B) Women should be paid as much as men for the same work.
  - C) There has been an increase in the rate of inflation.
  - D) Government has grown too large and should be reduced.

Use the following to answer questions 9-10:



9. In this figure, at a rental price of \$3, there will be
- A) an increase in demand.
  - B) an excess demand of 40 DVD rentals.
  - C) equilibrium in the rental market for DVDs.
  - D) an excess supply of 40 DVD rentals.

10. This figure shows the weekend rental market for DVDs in town. The equilibrium price is \_\_\_ and the equilibrium quantity is \_\_\_\_.

- A) \$3; 30
- B) \$6; 40.
- C) \$5; 50
- D) \$9; 90

11. If the estimated price elasticity of demand for foreign travel is 4.0, then:
- A) demand for foreign travel is very inelastic.
  - B) a 10% increase in the price of foreign travel will increase quantity demanded by 40%
  - C) a 20% decrease in the price of foreign travel will lead to an 80% increase in the quantity demanded.
  - D) all of the above are correct.
12. After you graduate, you want to open a business selling computers. There are many other businesses in your area that sell similar computers. Because of that, you can safely assume that the price elasticity of demand for your businesses computers will be:
- A) greater than one.
  - B) one.
  - C) less than one.
  - D) zero.
13. Some spectators paid a very high price for their tickets. Even so, it makes economic sense for them to leave the event at any time if they prefer to be elsewhere.
- A) True
  - B) False
14. A newspaper reported, "Prices have increased 40%, and the TV cable company reports a 20% increase in revenue." This suggests that the demand for TV cable service is elastic.
- A) True
  - B) False
15. A friend gives you a free ticket to a professional team's basketball game. If you don't go to the game, you would work at your part-time job for \$8 an hour. It takes five hours to travel to and attend the game, and costs you \$15 for parking. What is the cost of attending the game?
- A) \$55
  - B) zero
  - C) \$40
  - D) \$15

16. You manage a convenience mart. In your area, the income elasticity of demand for peanut butter, an inferior good, is  $-0.5$ . Due to local factory closings, local incomes are projected to decrease by 20%, on average, in the next month. If you want to 'make more money,' you should:
- A) stock 10% more peanut butter on the shelves.
  - B) stock 20% less peanut butter on the shelves.
  - C) stock 5% less peanut butter on the shelves.
  - D) stock 5% more peanut butter on the shelves.
17. Which of the following is a normative statement?
- A) We would all be better off if we could reduce our dependence on oil imports.
  - B) Increased defense spending will lead to higher budget deficits.
  - C) Higher expenditures on health care will reduce infant mortality rates.
  - D) International trade leads to expanded consumption opportunities.
18. Suppose the price of gasoline increases 10% and quantity demanded in Orlando drops 5% per day. The demand for gasoline in Orlando is:
- A) perfectly price inelastic.
  - B) price elastic.
  - C) price inelastic.
  - D) price unit-elastic.
19. Each month Jessica buys exactly 15 Big Macs regardless of the price. Jessica's price elasticity of demand for Big Macs is:
- A) greater than one.
  - B) zero.
  - C) less than one.
  - D) one.
20. Consider the market for cotton shirts. (Hint: Graph it.) An increase in the price of cotton used to make shirts will:
- A) decrease supply of cotton shirts.
  - B) decrease demand for cotton shirts.
  - C) increase supply of cotton shirts.
  - D) decrease both supply and demand for cotton shirts
21. A binding minimum wage can make unemployment worse among low-skilled workers.
- A) True
  - B) False

Use the following to answer question 22:

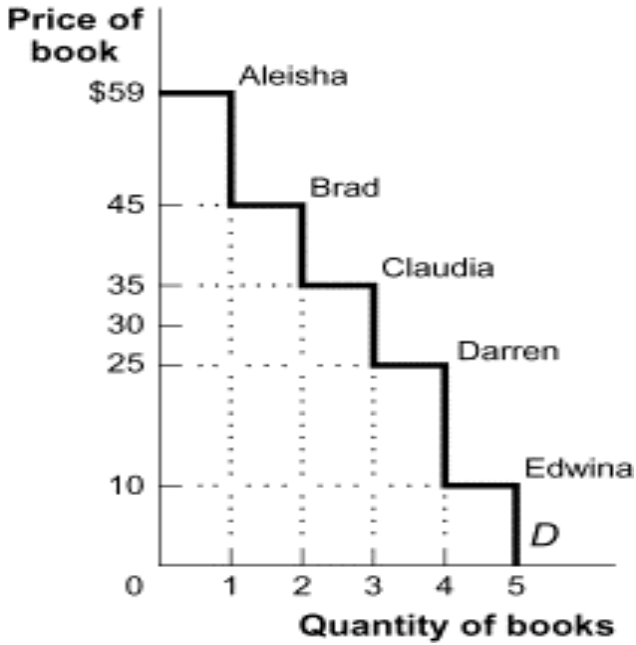


Market for Apartments

Rent (per apartment per month)	Quantity demanded (millions of apartments)	Quantity supplied (millions of apartments)
\$1,200	1.6	2.4
1,000	1.8	2.2
900	2.0	2.0
800	2.1	1.9
700	2.2	1.8
600	2.3	1.7

22. (Figure and Table: Market for Apartments) This figure represents a competitive market for apartments. If a government price ceiling at \$800 is now imposed on this market (in the name of fairness), then an inefficiency will result in the form of a:
- shortage of 0.6 million apartments.
  - shortage of 0.2 million apartments.
  - surplus of 0.6 million apartments.
  - surplus of 0.2 million apartments.
23. The cost of going to college is:
- tuition, the cost of housing, the cost of books, and forgone income.
  - tuition and the cost of housing.
  - forgone income only.
  - tuition, the cost of housing, and the cost of books.
24. A newspaper story recently reported that the price of new cars has decreased, and the quantity of new cars sold has dropped. These price and quantity changes could have been caused by: (Graph it!)
- an increase in buyers' incomes.
  - a decrease in production costs.
  - a decrease in buyers' incomes.
  - an increase in production costs.
25. A Director of Public Transport stated, "Every time we've raised bus fares, our revenues have fallen." This remark suggests that demand for bus service is elastic.
- True
  - False
26. What if the government levies an excise tax on high-fat foods to discourage sales as part of an anti-obesity program? Demand for these foods is inelastic but supply is elastic. Who will actually bear the burden of the tax? (Graph it.)
- consumers or buyers.
  - we can't answer this question without information about prices before and after.
  - producers or sellers.
  - producers and consumers will split the burden equally.

27. Economists use the term equilibrium to describe:
- A) when individuals are equal.
  - B) when no individual could be better off taking a different action.
  - C) when consumer surplus equals producers surplus.
  - D) both b and c.



28. In the accompanying figure, total consumer surplus is \_\_\_\_\_ when the price is \$10.

- A) \$124
- B) \$50
- C) \$144
- D) \$59

## Answer Key A

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