

**McMaster University  
Department of Economics**

**ECON 1B03  
Midterm Test #1**

**VERSION 3**

Instructor: Professor H Holmes  
Duration: 1.5 hours  
Total Number of Pages: 11

**INSTRUCTIONS:**

Answer all questions on the scan sheets. USE AN HB PENCIL ONLY. Make sure you carefully fill in the bubbles. YOU MUST FILL IN YOUR STUDENT NUMBER, AND VERSION NUMBER ON THE SCAN SHEET OR YOUR GRADE WILL NOT BE RECORDED AND YOU WILL LOSE THE BONUS MARK.

You may use the Casio FX calculator.

Hand in the scan sheet and this test copy.

**TOTAL MARKS AVAILABLE: 45**

NAME: \_\_\_\_\_

STUDENT #: \_\_\_\_\_

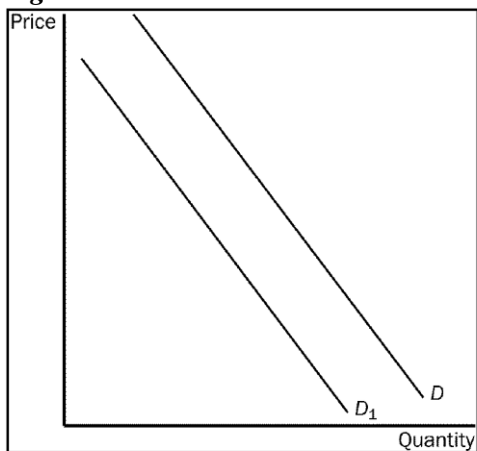
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**Multiple Choice**

*Identify the choice that best completes the statement or answers the question.*

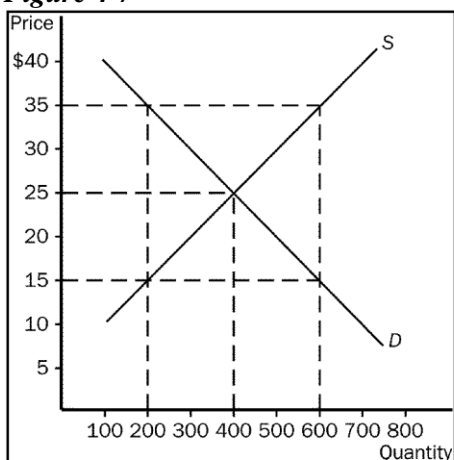
- \_\_\_\_ 1. Which of the following would NOT be a determinant of demand?
- the price of related goods
  - income
  - tastes
  - expectations
  - the prices of the inputs used to produce the good
- \_\_\_\_ 2. If a good is "normal," then an increase in income will result in
- no change in the demand for the good.
  - an increase in the demand for the good.
  - a decrease in the demand for the good.
  - a lower market price.
- \_\_\_\_ 3. If the price of a substitute to good X increases, then the
- demand for good X will decrease.
  - market price of good X will decrease.
  - demand for good X will increase.
  - quantity demanded for good X will increase.

**Figure 4-2**



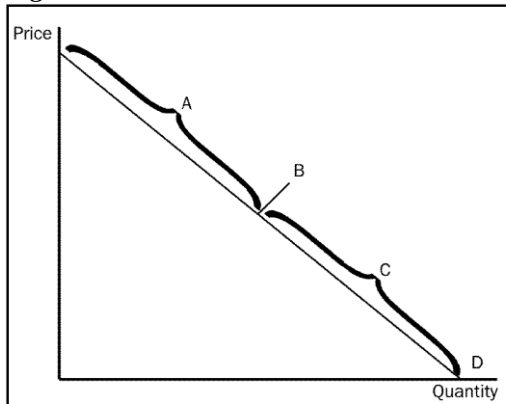
- \_\_\_\_ 4. **Refer to Figure 4-2.** The shift from  $D$  to  $D_1$  could be caused by
- an increase in price.
  - a decrease in the price of a complement.
  - an increase in technology.
  - a decrease in the price of a substitute.

5. Lead is an important input in the production of crystal. If the price of lead decreases, all else equal, we would expect the supply of
- crystal to be unaffected.
  - crystal to decrease.
  - crystal to increase.
  - lead to increase.

**Figure 4-7**

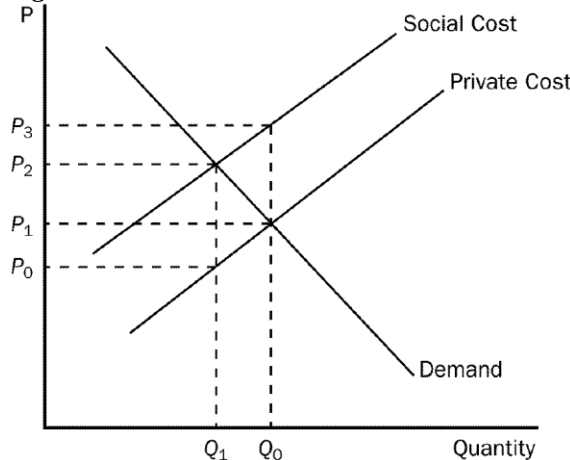
6. **Refer to Figure 4-7.** At a price of \$35,
- there would be a shortage of 400 units.
  - there would be a shortage of 200 units.
  - there would be a surplus of 200 units.
  - there would be a surplus of 400 units.
  - the market would be in equilibrium.
7. Which of the following would definitely result in a higher price in the market for Snickers?
- demand increases and supply decreases
  - demand and supply both decrease
  - demand decreases and supply increases
  - demand and supply both increase
8. Suppose that the number of buyers in a market increases and a technological advancement occurs. What would we expect to happen in the market?
- The equilibrium price would increase, but the impact on the amount sold in the market would be ambiguous.
  - The equilibrium price would decrease, but the impact on the amount sold in the market would be ambiguous.
  - Equilibrium quantity would increase, but the impact on equilibrium price would be ambiguous.
  - Both equilibrium price and equilibrium quantity would increase.
  - None of the above are correct.

- \_\_\_\_\_ 9. Market demand and supply are given as  $Q_d = 200 - 3P$  and  $Q_s = 2P - 50$ . Equilibrium price and quantity (P, Q) are
- a. (\$30, 110)
  - b. (\$50, 50)
  - c. (\$110, 30)
  - d. (\$200, 5)
- \_\_\_\_\_ 10. Market demand and supply are given as  $Q_d = 200 - 3P$  and  $Q_s = 2P - 50$ . At a price of \$60, there would be
- a. a shortage of 50 units
  - b. a surplus of 50 units
  - c. equilibrium
  - d. none of the above
- \_\_\_\_\_ 11. Market demand and supply are given as  $Q_d = 200 - 3P$  and  $Q_s = 2P - 50$ . Producer surplus in this market is
- a. \$625
  - b. \$1250
  - c. \$100
  - d. \$2500
- \_\_\_\_\_ 12. Market demand and supply are given as  $Q_d = 200 - 3P$  and  $Q_s = 2P - 50$ . If price changes from \$50 to \$60, the price elasticity of demand in this range is
- a. .21
  - b. .86
  - c. 2.4
  - d. 4.7
- \_\_\_\_\_ 13. Demand is said to be elastic if
- a. the price of the good responds substantially to changes in demand.
  - b. demand shifts substantially when the price of the good changes.
  - c. buyers do not respond much to changes in the price of the good.
  - d. the quantity demanded responds substantially to changes in the price of the good.
- \_\_\_\_\_ 14. If a good is a necessity, demand for the good would tend to be
- a. elastic.
  - b. horizontal.
  - c. unit elastic.
  - d. inelastic.
- \_\_\_\_\_ 15. When the price of bubble gum is \$0.50, the quantity demanded is 400 packs per day. When the price falls to \$0.40, the quantity demanded increases to 600. Given this information and using the midpoint method, you know that the demand for bubble gum is
- a. inelastic.
  - b. elastic.
  - c. unit elastic.
  - d. perfectly inelastic.
- \_\_\_\_\_ 16. If the price elasticity of demand for a good is 4.0, then a 10 percent increase in price would result in a
- a. 4.0 percent decrease in the quantity demanded.
  - b. 10 percent decrease in the quantity demanded.
  - c. 40 percent decrease in the quantity demanded.
  - d. 400 percent decrease in the quantity demanded.

**Figure 5-1**

17. Refer to Figure 5-1. The section of the demand curve labeled A represents the
- elastic section of the demand curve.
  - inelastic section of the demand curve.
  - unit elastic section of the demand curve.
  - perfectly elastic section of the demand curve.
18. When the local used bookstore prices economics books at \$15.00 each, they generally sell 70 per month. If they lower the price to \$7.00 each they sell 90. Given this, we know that the elasticity of demand for economics books is
- 2.91, so this store should lower price to raise total revenue.
  - 2.91, so this store should raise price to raise total revenue.
  - 0.34, so this store should lower price to raise total revenue.
  - 0.34, so this store should raise price to raise total revenue.
19. If a 6 percent increase in income results in a 10 percent increase in the quantity demanded of pizza, then the income elasticity of demand for pizza is
- negative and therefore pizza is a normal good.
  - negative and therefore pizza is a inferior good.
  - positive and therefore pizza is an inferior good.
  - positive and therefore pizza is a normal good.
20. If two goods are substitutes, their cross-price elasticity will be
- positive.
  - negative.
  - zero.
  - 1.
21. Suppose that an increase in the price of carrots from \$1.20 to \$1.40 per pound raises the amount of carrots that carrot farmers produce from 1.2 million pounds to 1.6 million pounds. Using the midpoint method, what would be the elasticity of supply?
- 2.00
  - 1.86
  - 0.54
  - 0.50

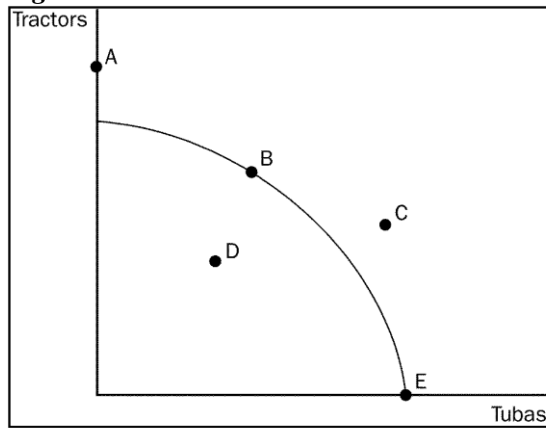
- \_\_\_\_\_ 22. Belva is willing to pay \$65.00 for a pair of shoes for a formal dance. She finds a pair at her favorite outlet shoe store for \$48.00. Belva's consumer surplus is
- \$17.
  - \$31.
  - \$48.
  - \$65.
- \_\_\_\_\_ 23. Ray buys a new tractor for \$118,000. He receives consumer surplus of \$13,000 on his purchase. Ray's willingness to pay is
- \$13,000.
  - \$105,000.
  - \$118,000.
  - \$131,000.
- \_\_\_\_\_ 24. If the cost of producing sofas decreases, consumer surplus will
- increase, then decrease.
  - decrease.
  - remain constant.
  - increase.
- \_\_\_\_\_ 25. The Surgeon General announces that eating chocolate increases tooth decay. As a result, the equilibrium market price of chocolate
- increases, and producer surplus increases.
  - increases, and producer surplus decreases.
  - decreases, and producer surplus decreases.
  - decreases, and producer surplus increases.
- \_\_\_\_\_ 26. An externality exists when
- the government intercedes in the operation of private markets by forcing the market to adjust to the balance of supply and demand.
  - markets are not able to reach equilibrium.
  - a firm sells its product in a foreign market.
  - a person engages in an activity that influences the well-being of a bystander and yet neither pays nor receives payment for that effect.
- \_\_\_\_\_ 27. Which of the following illustrates the concept of a negative externality?
- A college professor plays a vigorous game of racquet ball with the racquet he recently purchased.
  - A flood wipes out a farmer's entire corn crop.
  - A college student plays his new stereo system at 2:00 a.m.
  - A janitor eats a Big Mac during his lunch break.

**Figure 10-5**

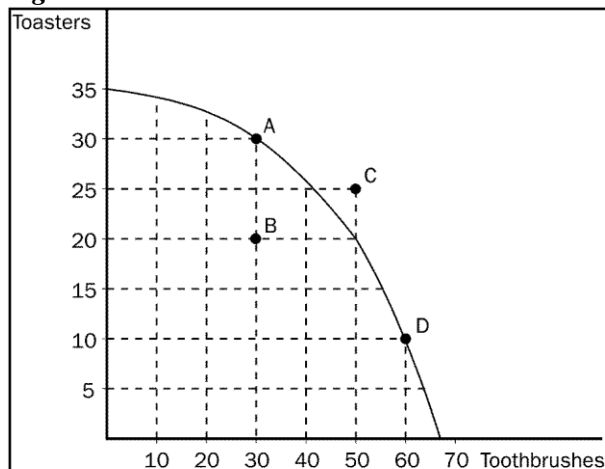
28. Refer to Figure 10-5. Which price and quantity combination represents the social optimum?
- $P_0$  and  $Q_1$ .
  - $P_2$  and  $Q_1$ .
  - $P_1$  and  $Q_2$ .
  - $P_2$  and  $Q_2$ .
29. A negative externality will cause a private market to produce
- less than is socially desirable.
  - more than is socially desirable.
  - more than market equilibrium.
  - less than market equilibrium.
30. Private markets fail to reach a socially optimal level when negative externalities are present because
- social costs equal private costs at the private market solution.
  - private costs exceed social costs at the private market solution.
  - social costs exceed private costs at the private market solution.
  - they internalize externalities.
31. A good is considered scarce in a society when
- more output of the good is possible.
  - everyone in that society cannot have all they want of the good.
  - the government restricts production of the good.
  - only the richest people in the economy can buy all they want of the good.
32. Economists use the word equity to describe a situation in which
- each member of society has the same income.
  - society is getting the most it can from its scarce resources.
  - those in society who have the least will receive the most.
  - the benefits of society's resources are distributed fairly among society's members.

- \_\_\_\_\_ 33. Which of the following is the best example of a marginal change?
- After graduating college, Audrey's income increases from \$500 per month to \$3,000 per month.
  - Morgan gets a raise at her part-time job and is now paid \$7.25 per hour instead of \$7.00.
  - Housing prices in an area increase by 40% when a new highway is built in a small town.
  - A hard freeze wipes out half of the tobacco crop in Ontario and the price of orange juice doubles.
- \_\_\_\_\_ 34. Production possibilities frontiers are usually bowed outward. This is because
- the more resources a society uses to produce one good, the fewer resources it has available to produce another good.
  - it reflects the fact that the opportunity cost of producing a good falls as one produces more and more of it.
  - of the effects of technological change.
  - resources are specialized, that is, some are better at producing particular goods rather than other goods.
- \_\_\_\_\_ 35. Suppose an economy produces two goods, food and machines. This economy always operates on its production possibilities frontier. Last year, it produced 50 units of food and 30 machines. This year it experienced a technological advance in its machine-making industry. As a result, this year the society wants to produce 55 units of food and 30 machines. Which of the following statements is true?
- Because the technological advance occurred in the machine-making industry, it will not be possible to increase food production without reducing machine production below 30.
  - Because the technological advance occurred in the machine-making industry, increases in output can only occur in the machine industry.
  - In order to increase food production in these circumstances without reducing machine production, the economy must reduce inefficiencies.
  - The technological advance reduced the amount of resources needed to produce 30 machines. These resources could be used to produce more food.
  - None of the above are correct.
- \_\_\_\_\_ 36. The production possibilities frontier is a
- map which shows the frontier beyond which agriculture is unprofitable.
  - map which shows areas of the world in which capitalist production is now possible.
  - graph which shows the various combinations of resources that can be used to produce a given level of output.
  - graph that shows the various combinations of output the economy can possibly produce given the available resources and technology.



**Figure 2-3**

37. Refer to Figure 2-3. The economy can produce at which point or points?
- B, D, E
  - A, B, D, E
  - D, C
  - D
  - D, E
38. Refer to Figure 2-3. Which point or points are inefficient?
- A, C
  - D, C
  - C
  - D

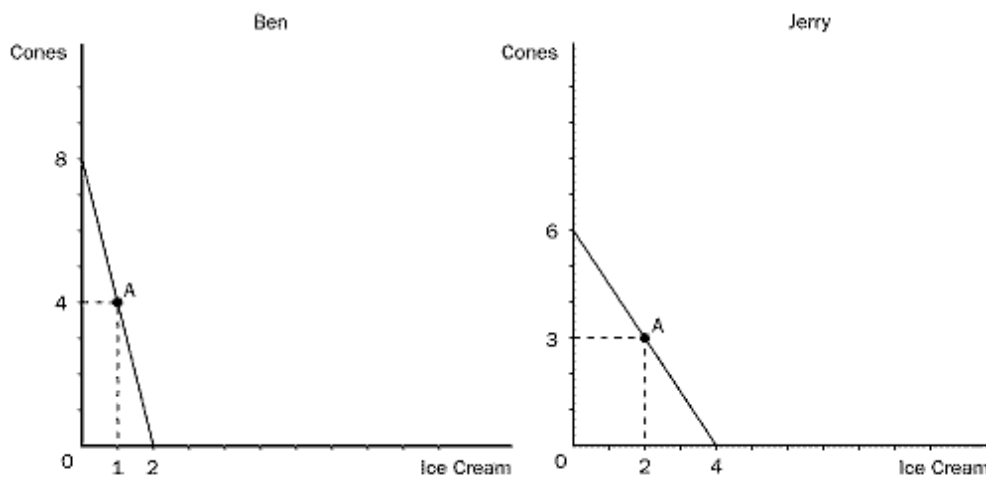
**Figure 2-4**

39. **Refer to Figure 2-4 on the previous page.** The opportunity cost of getting 15 additional toasters by moving from point D to point C is
- 10 toothbrushes.
  - 20 toothbrushes.
  - 30 toothbrushes.
  - It is impossible for the economy to move from point D to point C.

**Table 3-1**

	Labour Hours Needed to Make 1 Pound of:		Pounds produced in 40 hours:	
	Meat	Potatoes	Meat	Potatoes
Farmer	8	2	5	20
Rancher	4	5	10	8

40. **Refer to Table 3-1.** The opportunity cost of 1 pound of meat for the farmer is
- $\frac{1}{4}$  hour of labour.
  - 4 hours of labour.
  - 4 pounds of potatoes.
  - $\frac{1}{4}$  pound of potatoes.
41. **Refer to Table 3-1.** The opportunity cost of 1 pound of potatoes for the rancher is
- 4 hours of labour.
  - 5 hours of labour.
  - $\frac{5}{4}$  pounds of meat.
  - $\frac{4}{5}$  pound of meat.
42. **Refer to Table 3-1.** The Farmer has an absolute advantage in
- meat, and the Rancher has an absolute advantage in potatoes.
  - potatoes, and the Rancher has an absolute advantage in meat.
  - meat, and the Rancher has an absolute advantage in meat.
  - neither good, and the Rancher has an absolute advantage in both goods.

**Figure 3-2**

- \_\_\_\_\_ 43. **Refer to Figure 3-2 on the previous page.** For Ben, the opportunity cost of 1 pound of ice cream is
- 4 pounds of cones.
  - 1/2 pound of cones.
  - 2 pounds of cones.
  - 1/4 pound of cones.
- \_\_\_\_\_ 44. **Refer to Figure 3-2 on the previous page.** Ben has a comparative advantage in
- cones and Jerry has a comparative advantage in ice cream.
  - ice cream and Jerry has a comparative advantage in cones.
  - neither good and Jerry has a comparative advantage in both goods.
  - both goods and Jerry has a comparative advantage in neither good.
- \_\_\_\_\_ 45. **Refer to Figure 3-2.** Ben and Jerry were currently both producing at point A on their production possibilities frontier and then Ben decided he would be willing to trade 4 pounds of cones to get 2 pounds of ice cream from Jerry. If both decided to specialize in what they had a comparative advantage in and trade, the gains from trade would be
- 1 pound of cones for Ben and 1 pound of ice cream for Jerry.
  - 1 pound of ice cream for Ben and 1 pound of cones for Jerry.
  - 2 pounds of ice cream for Ben and 2 pounds of cones for Jerry.
  - 2 pounds of ice cream for Ben and 1 pound of cones for Jerry.
- \_\_\_\_\_ 46. “The Green Bay Packers play at Lambeau Field” is
- |                          |                       |
|--------------------------|-----------------------|
| a. a positive statement  | c. not true           |
| b. a normative statement | d. none of the above. |