

**McMaster University Department of Economics  
ECON 1B03  
Winter 2012**

**Test 1 ANSWERS**

**Saturday February 11, 2012  
90 minutes  
Instructor: H Holmes**

**MULTIPLE CHOICE**

Answer all questions on the scan sheet using HB pencil.  
Calculators are permitted.  
Hand in the scan and this sheet separately.

**TOTAL MC MARKS AVAILABLE: 40**

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

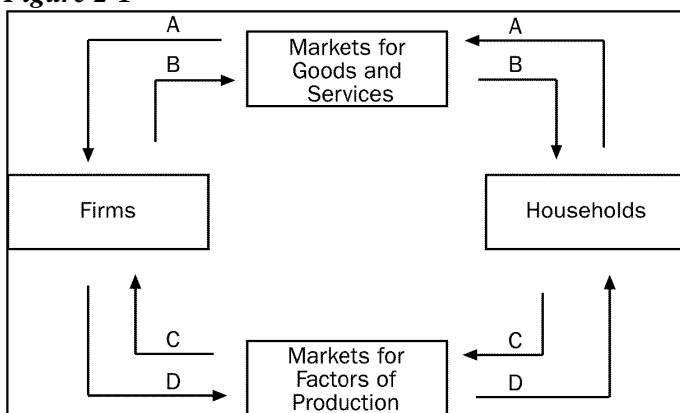
STUDENT #: \_\_\_\_\_

**Multiple Choice**

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

- \_\_\_\_ 1. Henry decides to spend two hours playing golf rather than working at his job which pays \$8 per hour. Henry's tradeoff is
- the \$16 he could have earned working for two hours.
  - nothing, because he enjoys playing golf more than working.
  - the increase in skill he obtains from playing golf for those two hours.
  - nothing, because he spent \$16 for green fees to play golf.
- \_\_\_\_ 2. The two loops in the circular-flow diagram represent the flow of
- goods and the flow of services.
  - dollars and the flow of financial assets.
  - inputs and outputs and the flow of dollars.
  - capital goods and the flow of consumer goods.

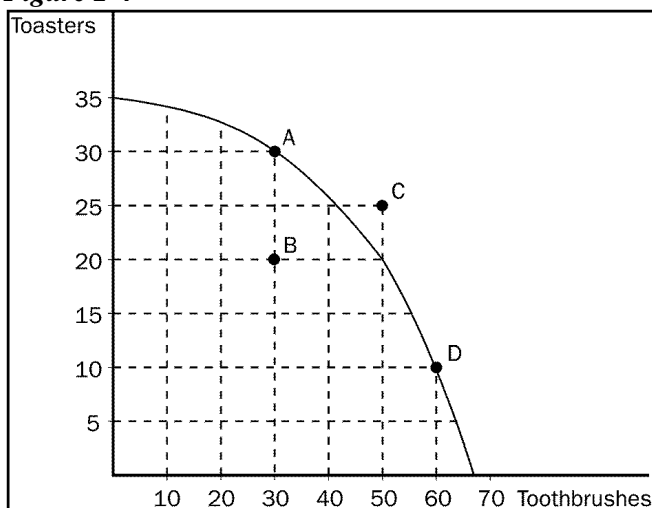
**Figure 2-1**



- \_\_\_\_ 3. Refer to Figure 2-1. Which arrow shows the flow of goods and services?
- A
  - B
  - C
  - D
- \_\_\_\_ 4. 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.

5. If an economy is producing efficiently
- there is no way to produce more of one good without producing less of the other.
  - it is possible to produce more of both goods.
  - it is possible to produce more of one good without producing less of the other.
  - it is not possible to produce more of one good at any cost.

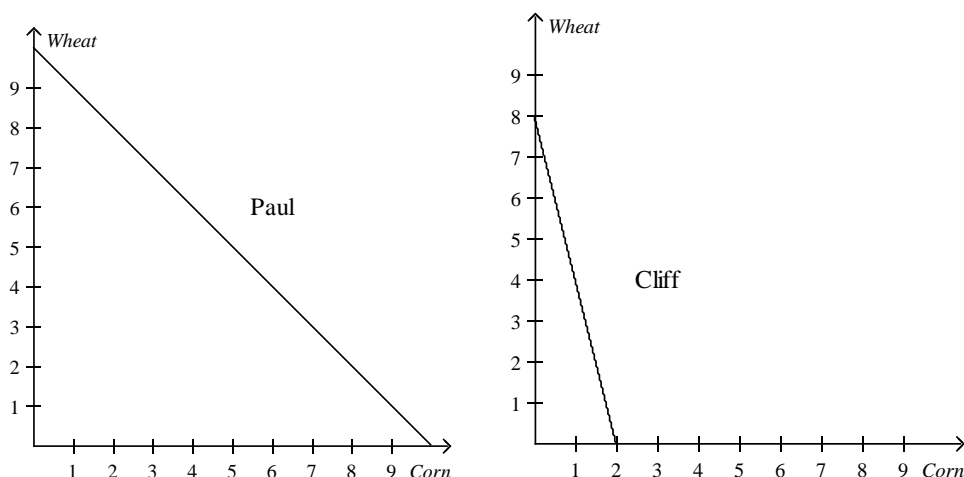
**Figure 2-4**



6. **Refer to Figure 2-4.** The opportunity cost to the economy of getting 30 additional toothbrushes by moving from point A to point D is
- 10 toasters.
  - 15 toasters.
  - 20 toasters.
  - 25 toasters.
7. **Refer to Figure 2-4.** 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.
8. Economists view positive statements as
- affirmative, justifying existing economic policy.
  - optimistic, putting the best possible interpretation on things.
  - descriptive, making a claim about how the world is.
  - prescriptive, making a claim about how the world ought to be.

9. The difference between production possibilities frontiers that are bowed out and those that are linear is that
- bowed out production possibilities frontiers illustrate tradeoffs where linear production possibilities frontiers do not.
  - bowed out production possibilities frontiers show increasing opportunity cost where linear ones show constant opportunity cost.**
  - bowed out production possibilities frontiers are the result of perfectly shiftable resources where linear production possibilities frontiers are not.
  - linear production possibilities frontiers illustrate real world conditions more than bowed out production possibilities frontiers.
10. Which of the following is NOT correct?
- Trade allows for specialization.
  - Trade is good for nations.
  - Trade is based on absolute advantage.**
  - Trade allows individuals to consume outside of their individual production possibilities curve.

Figure 3-5



11. **Refer to Figure 3-5.** The opportunity cost of 1 bushel of wheat for Cliff is
- 1/4 bushel of corn.**
  - 1/2 bushel of corn.
  - 1 bushel of corn.
  - 2 bushels of corn.
12. **Refer to Figure 3-5.** Assume that both Paul and Cliff divide their time equally between the production of corn and wheat, and they do not trade. If they were the only producers of corn and wheat, then total production of wheat and corn would be
- 6 bushels of wheat and 9 bushels of corn.
  - 7 bushels of wheat and 8 bushels of corn.
  - 8 bushels of wheat and 7 bushels of corn.
  - 9 bushels of wheat and 6 bushels of corn.**

13. **Refer to Figure 3-5.** Assume that Cliff and Paul were both producing wheat and corn, and both were dividing their time equally between the two. Then they decide to specialize in the product for which they have a comparative advantage. As a result, the production of corn would
- increase by 1 bushel.
  - increase by 2 bushels.
  - increase by 3 bushels.
  - increase by 4 bushels.**
14. **Refer to Figure 3-5.** Assume that Cliff and Paul were both producing wheat and corn, and both were dividing their time equally between the two. Then they decide to specialize in the product for which they have a comparative advantage and trade 3 bushels of wheat for 3 bushels of corn. Cliff would now be able to consume
- 5 bushels of wheat and 3 bushels of corn.**
  - 4 bushels of wheat and 3 bushels of corn.
  - 3 bushels of wheat and 5 bushels of corn.
  - 3 bushels of wheat and 3 bushels of corn.
15. **Refer to Figure 3-5.** Which of the following is true for Cliff and Paul
- Paul has a comparative advantage in both wheat and corn.
  - Paul has an absolute advantage in wheat and Cliff has a comparative advantage in corn.
  - Cliff has a comparative advantage in wheat and Paul has a comparative advantage in corn.**
  - Cliff has a comparative advantage in both wheat and corn.
16. Suppose a gardener produces both green beans and corn in her garden. If the opportunity cost of one bushel of corn is  $\frac{3}{5}$  bushel of green beans, then the opportunity cost of 1 bushel of green beans is
- $\frac{5}{3}$  bushels of corn.**
  - $\frac{2}{5}$  bushel of corn.
  - $\frac{5}{2}$  bushels of corn.
  - $\frac{8}{5}$  bushels of corn.

**Table 3-3**

	Labour Hours Needed to Make One Unit of:		Amount Produced in 24 Hours:	
	Baskets	Birdhouses	Baskets	Birdhouses
Alberta	6	2	4	12
Manitoba	3	4	8	6

17. **Refer to Table 3-3.** Alberta has an absolute advantage in
- birdhouses and Manitoba has an absolute advantage in baskets.**
  - baskets and Manitoba has an absolute advantage in birdhouses.
  - neither good and Manitoba has an absolute advantage in both goods.
  - both goods and Manitoba has an absolute advantage in neither good.

18. Refer to Table 3-3. Alberta has a comparative advantage in
- baskets and Manitoba has a comparative advantage in birdhouses.
  - birdhouses and Manitoba has a comparative advantage in baskets.**
  - neither good and Manitoba has a comparative advantage in both goods.
  - both goods and Manitoba has a comparative advantage in neither good.

**Table 4-1**

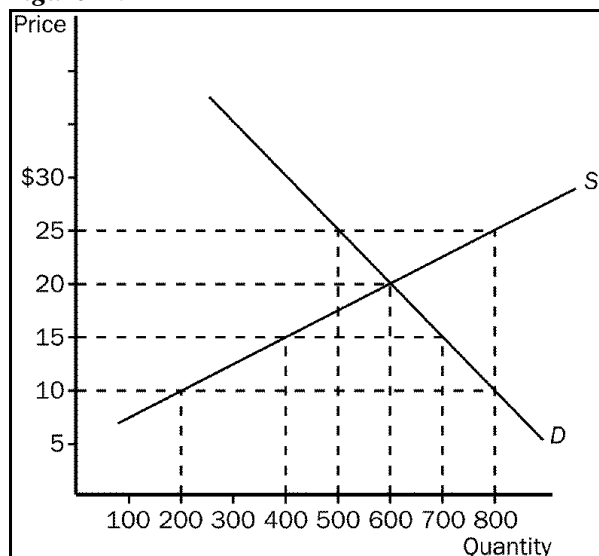
The table shows individual demand schedules for a market.

Price of the Good	Aaron	Angela	Austin	Alyssa
\$0.00	20	16	10	8
0.50	18	12	6	6
1.00	14	10	2	5
1.50	12	8	0	4
2.00	6	6	0	2
2.50	0	4	0	0

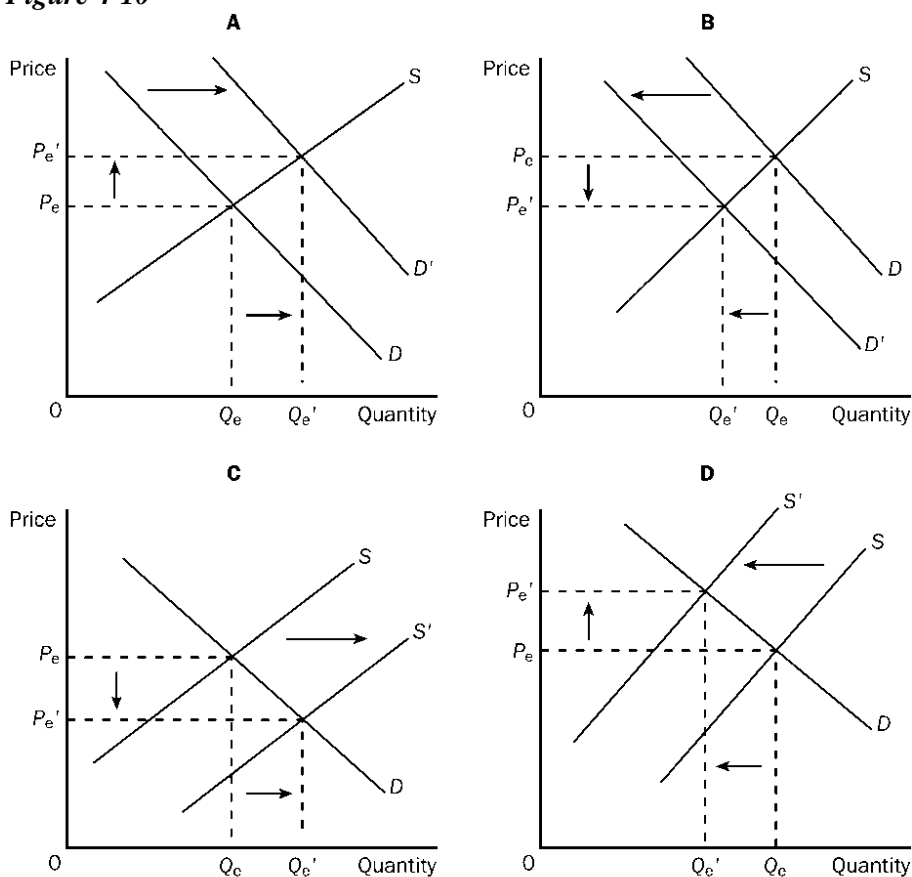
19. Refer to Table 4-1. If the price increases from \$1.00 to \$1.50,
- the market demand increases by 20 units.
  - the quantity demanded in the market decreases by 2 units.
  - individual demands will increase.
  - the quantity demanded in the market decreases by 7 units.**
20. If Francis receives a decrease in his pay, we would expect
- Francis's demand for each good he purchases to remain unchanged.
  - Francis's demand for normal goods to increase.
  - Francis's demand for luxury goods to increase.
  - Francis's demand for inferior goods to increase.**
21. Two goods are complements if a decrease in the price of one good
- increases the quantity demanded of the other good.
  - reduces the demand for the other good.
  - reduces the quantity demanded of the other good.
  - raises the demand for the other good.**
22. Which of the following would NOT shift the demand curve for a good or service?
- a change in income
  - a change in the price of the good or service**
  - a change in expectations about the price of the good or service
  - a change in the price of a related good
23. Which of the following cause and effect events is in order for a seller?
- Technology improves, profit falls, the supply curve shifts left.
  - An input price falls, profit increases, the supply curve shifts right.**
  - An input price rises, profit falls, the supply curve shifts right.
  - An input price rises, profit rises, the supply curve shifts left.

- \_\_\_\_ 24. If, at the current price, there is a shortage of a good,
- sellers are producing more than buyers wish to buy.
  - the market must be in equilibrium.
  - the price is below the equilibrium price.**
  - quantity demanded equals quantity supplied.

**Figure 4-9**



- \_\_\_\_ 25. **Refer to Figure 4-9.** If the price is \$25, there would be a
- surplus of 300 and price would fall.**
  - surplus of 200 and price would fall.
  - shortage of 200 and price would rise.
  - shortage of 300 and price would rise.
- \_\_\_\_ 26. If a surplus exists in a market we know that the actual price is
- above equilibrium price and quantity supplied is greater than quantity demanded.**
  - above equilibrium price and quantity demanded is greater than quantity supplied.
  - below equilibrium price and quantity demanded is greater than quantity supplied.
  - below equilibrium price and quantity supplied is greater than quantity demanded.

**Figure 4-10**

27. Refer to Figure 4-10. Which of the four graphs represents the market for peanut butter after a major hurricane hits the peanut-growing south?
- A
  - B
  - C
  - D
28. Refer to Figure 4-10. Which of the four graphs represents the market for winter boots in June?
- A
  - B
  - C
  - D
29. Refer to Figure 4-10. Which of the four graphs shown illustrates an increase in quantity supplied?
- A
  - B
  - C
  - D



- \_\_\_\_ 30. When the price of kittens was \$25 each, the pet shop sold 20 per month. When they raised the price to \$35 each, they sold 14 per month. The elasticity of demand for kittens would be
- 1.66.
  - 1.06.**
  - 0.94.
  - 0.60.
- \_\_\_\_ 31. 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.**
- \_\_\_\_ 32. Moving up a linear demand curve, we know that total revenue
- increases, then decreases.**
  - decreases, then increases.
  - increases.
  - decreases.
- \_\_\_\_ 33. Suppose that when the price of corn is \$2 per bushel, farmers can sell 10 million bushels. When the price of corn is \$3 per bushel, farmers can sell 8 million bushels. Which of the following statements is true?
- The demand for corn is income inelastic, and so an increase in the price of corn will increase the income of corn farmers.
  - The demand for corn is income elastic, and so an increase in the price of corn will increase the income of corn farmers.
  - The demand for corn is price inelastic, and so an increase in the price of corn will increase the income of corn farmers.**
  - The demand for corn is price elastic, and so an increase in the price of corn will increase the income of corn farmers.

**Table 5-1**

Income	Quantity of Good X Purchased	Quantity of Good Y Purchased
\$30,000	2	20
\$40,000	5	10

- \_\_\_\_ 34. **Refer to Table 5-1.** Using the midpoint method, what is the income elasticity of good Y?
- 3.33
  - 2.33**
  - 1.2
  - 1.33

- \_\_\_\_ 35. Last month, sellers of Good Y took in \$100 and sold 50 units of Good Y. This month sellers of Good Y raised their price, took in \$120 and sold 40 units of Good Y. At the same time, the price of Good X stayed the same, but sales of Good X increased from 20 units to 40 units. We can conclude that Goods X and Y are
- substitutes, and have a cross-price elasticity of 0.60.
  - complements, and have a cross-price elasticity of 0.60.
  - substitutes, and have a cross-price elasticity of 1.67.**
  - complements, and have a cross-price elasticity of 1.67.
- \_\_\_\_ 36. Suppose that the cross-price elasticity of demand between hot dogs and mustard is -2.00. This implies that a 20 percent increase in the price of hot dogs will cause the quantity of mustard purchased to
- fall by 200 percent.
  - fall by 40 percent.**
  - rise by 200 percent.
  - rise by 40 percent.
- \_\_\_\_ 37. Market demand is  $Q_d = 1000 - .5P$  and market supply is  $Q_s = 4P - 350$ . In equilibrium,
- $P = 300$  and  $Q = 850$**
  - $P = 850$  and  $Q = 300$
  - $P = 144.45$  and  $Q = 928$
  - $P = 927.77$  and  $Q = 145$
- \_\_\_\_ 38. Market demand is  $Q_d = 1000 - .5P$  and market supply is  $Q_s = 4P - 350$ . Producer surplus in this market is
- \$180,625.00
  - \$90,312.50**
  - \$63,750.50
  - \$127,500.00
- \_\_\_\_ 39. Market demand is  $Q_d = 1000 - .5P$  and market supply is  $Q_s = 4P - 350$ . Suppose the market price increased by \$20 from equilibrium price. The elasticity of demand over this range is
- .50
  - 2.63
  - .18**
  - 5.45
- \_\_\_\_ 40. Market demand is  $Q_d = 1000 - .5P$  and market supply is  $Q_s = 4P - 350$ . Suppose the market price was \$20 higher than equilibrium price. Then,
- there would be a shortage of 10 units.
  - there would be a deadweight loss of \$112.50.**
  - there would be a surplus of 10 units.
  - there would be a deadweight loss of \$225.00
- \_\_\_\_ 41. BONUS: How many days per week does the Economics Clinic run?
- 4
  - 3**
  - 2
  - 5