McMaster University
Department of Economics

ECON 1B03 DAY SECTIONS
Midterm Test #1
Saturday October 13, 2007
VERSION 1

Instructor: Professor H Holmes
Duration: 2 hours; 2:00 – 4:00pm
Total Number of Pages: 15

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, VERSION NUMBER AND SECTION NUMBER ON THE SCAN SHEET OR YOUR GRADE WILL NOT BE RECORDED.

You may use the Casio FX calculator.

Hand in the scan sheet, your rough work paper and this test copy.

TOTAL MARKS AVAILABLE: 60

NAME:_____

STUDENT #: _____

MUGSI ID: _____

SECTION**:** Circle One: C01 (9:30-10:20) C02 (12:30-1:20) EC01 (Wednesday night)

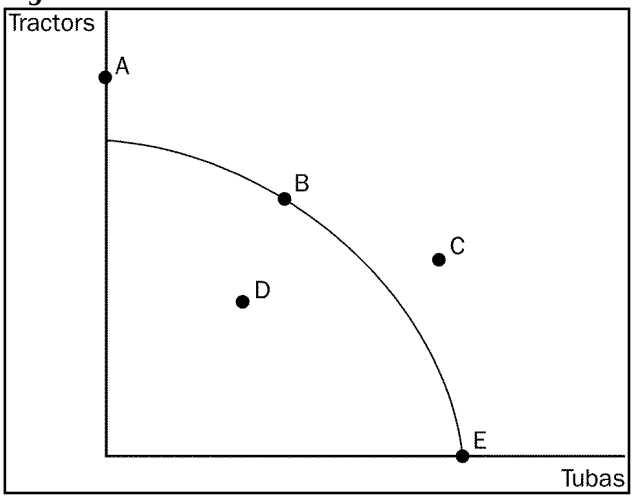
Multiple Choice
Identify the choice that best completes the statement or answers the question.

____ 1. Any point on a country's production possibilities frontier represents a combination of two goods that an economy
a. will never be able to produce.
b. can produce using all available resources and technology.
c. can produce using some of its resources and technology.
d. may be able to produce sometime in the future with additional resources and technology.

____ 2. Which of the following is the most accurate statement about production possibilities?
a. An economy can produce only on the production possibilities frontier.
b. An economy can produce at any point inside or outside a production possibilities frontier.
c. An economy can produce at any point on or inside the production possibilities frontier, but not outside the frontier.
d. An economy can produce at any point inside the production possibilities frontier, but not on or outside the frontier.

____ 3. If an economy is producing efficiently
a. there is no way to produce more of one good without producing less of the other. On the PPF
b. it is possible to produce more of both goods.
c. it is possible to produce more of one good without producing less of the other.
d. it is not possible to produce more of one good at any cost.

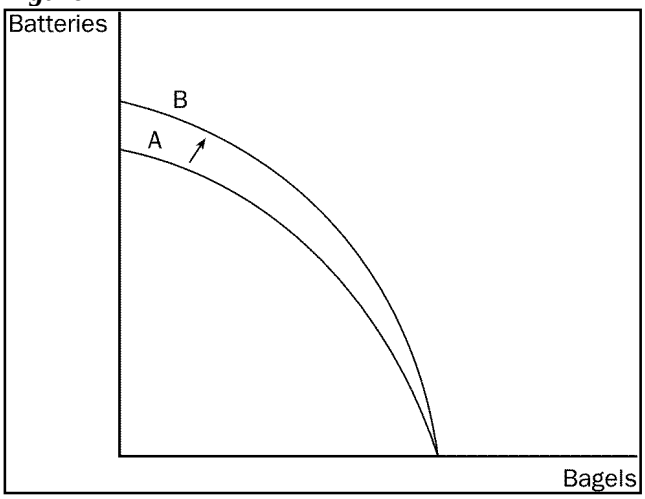
Figure 1



____ 4. **Refer to Figure 1**. The economy can produce at which point or points?
a. B, D, E
b. A, B, D, E
c. D, C
d. D

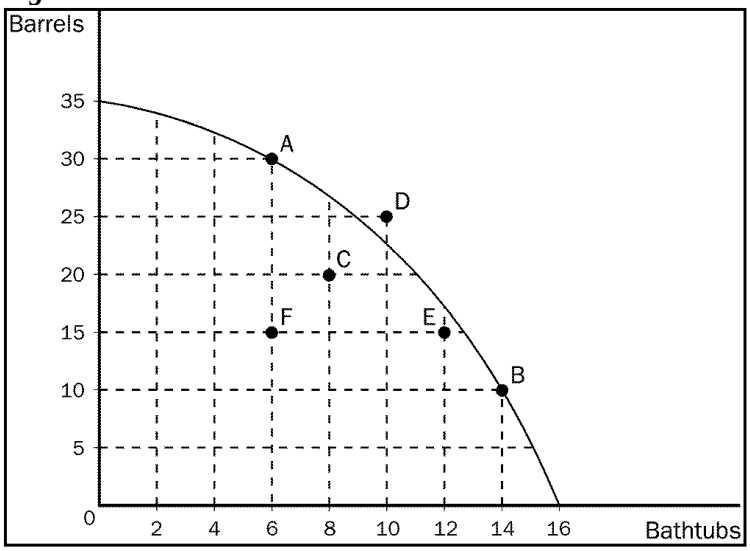
____ 5. **Refer to Figure 1**. The economy CANNOT produce at which point or points?
a. A
b. C
c. A, C outside the PPF
d. A, C, D,

Figure 2



____ 6. **Refer to Figure 2.** The shift of the frontier from A to B was most likely caused by which of the following?
a. technological improvement in the production of batteries
b. more labour available in the economy
c. a general technological breakthrough
d. more capital available in the economy

Figure 3



____ 7. **Refer to Figure 3.** An efficient combination of bathtubs and barrels would be
a. 30 barrels and 6 bathtubs. On the PPF
b. 20 barrels and 8 bathtubs.
c. 25 barrels and 12 bathtubs.
d. 15 barrels and 12 bathtubs.

____ 8. **Refer to Figure 3.**. What is the opportunity cost of moving from point A to point B?
a. 8 bathtubs
b. 2.5 barrels to get 8 bathtubs, give up 20 barrels so to get 1 bathtub, give up 20/8=2.5 barrels
c. the difference between the 8 bathtubs you get and the 20 barrels you give up
d. the difference between the 20 barrels you get and the 8 bathtubs you give up

____ 9. When economists are speaking as policy advisors, they are more likely to use
a. normative statements. advising means making judgments
b. positive statements.
c. objective statements.
d. All of the above are correct.

____ 10. 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?
a. 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.
b. Because the technological advance occurred in the machine-making industry, increases in output can only occur in the machine industry.
c. In order to increase food production in these circumstances without reducing machine production, the economy must reduce inefficiencies.
d. The technological advance reduced the amount of resources needed to produce 30 machines. These resources could be used to produce more food.

Table 1

	Labor 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

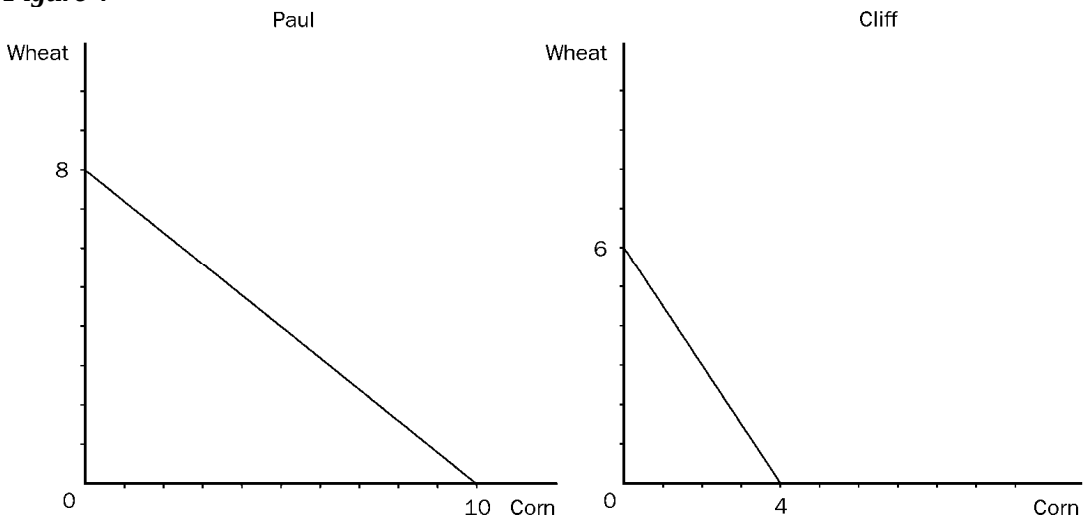
____ 11. **Refer to Table 1**. The opportunity cost of 1 pound of meat for the farmer is
a. 1/4 hour of labour.
b. 4 hours of labour.
c. 4 pounds of potatoes. To get 5 meat, give up 20 potatoes so to get 1 meat give up 20/4=4 potatoes
d. 1/4 pound of potatoes.

____ 12. **Refer to Table 1**. The opportunity cost of 1 pound of meat for the rancher is
a. 4 hours of labour.
b. 5 hours of labour.
c. 5/4 pounds of potatoes.
d. 4/5 pound of potatoes. same reasoning as in #11

____ 13. **Refer to Table 1**. The Farmer has an absolute advantage in
a. meat, and the Rancher has an absolute advantage in potatoes.
b. potatoes, and the Rancher has an absolute advantage in meat. Farmer uses less labour for potatoes and rancher uses less labour for meat.
c. meat, and the Rancher has an absolute advantage in meat.
d. neither good, and the Rancher has an absolute advantage in both goods.

____ 14. **Refer to Table 1**. The Rancher has an absolute advantage in
a. both goods, and the Farmer has a comparative advantage in meat.
b. meat, and the Farmer has a comparative advantage in potatoes. Farmer's opp cost of potatoes is lower than rancher's.
c. meat, and the Farmer has a comparative advantage in neither good.
d. both goods, and the Farmer has a comparative advantage in potatoes.

Figure 4



____ 15. **Refer to Figure 4**. The opportunity cost of 1 bushel of wheat for Cliff is
a. 1/3 bushel of corn.
b. 2/3 bushel of corn. To get 6 wheat give up 4 corn so to get 1 wheat give up 4/6=2/3 corn.
c. 1 bushel of corn.
d. 3/2 bushels of corn.

____ 16. **Refer to Figure 4**. Assume that Cliff and Paul were both producing wheat and corn, and each were dividing their time equally between the two. Then they decide to specialize in the product they have a comparative advantage in. As a result, total production of corn would
a. increase by 1 bushel.
b. increase by 3 bushels. Initially, Cliff would produce 2 corn and Paul would produce 5 corn (7 total). Paul has comp adv in corn and would specialize in corn – produce only corn so produce 10 corn – increase of 3 corn.
c. increase by 5 bushels.
d. decrease by 2 bushels.

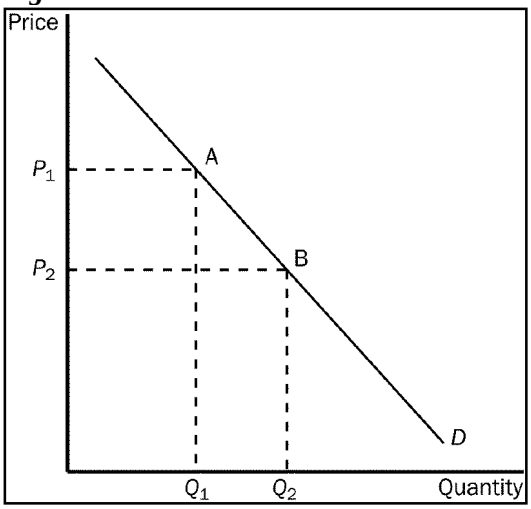
____ 17. Which of the following would NOT be a determinant of demand?
a. the price of related goods
b. income
c. tastes
d. the prices of the inputs used to produce the good determinant of supply

____ 18. You lose your job and as a result, you buy fewer mystery books. This shows that you consider mystery books to be a/an
a. normal good.
b. inferior good.
c. luxury good.
d. complementary good.

____ 19. If the price of a substitute to good X increases, then the
a. demand for good X will decrease.
b. market price of good X will decrease.
c. demand for good X will increase.
d. quantity demanded for good X will increase.

____ 20. An example of complementary goods would be
a. hamburgers and hot dogs.
b. lawnmowers and automobiles.
c. hamburgers and fries. You eat them together.
d. Coke and Pepsi.

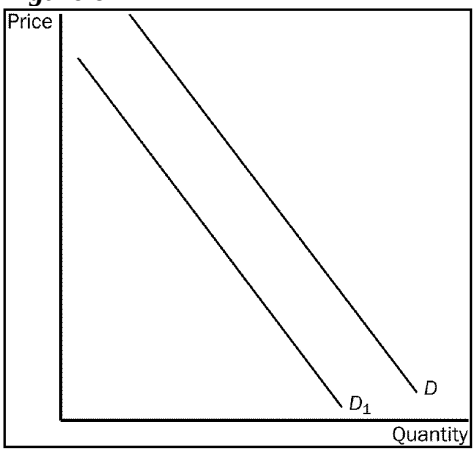
Figure 5



____ 21. **Refer to Figure 5**. The movement from point A to point B on the graph shows
a. a decrease in demand.
b. an increase in demand.
c. a decrease in quantity demanded.
d. an increase in quantity demanded.

____ 22. Warrensburg is a small college town in Missouri. At the end of August each year, the market demand for fast food in Warrensburg
a. shifts right. As students move back, population increases and demand increases.
b. shifts left.
c. remains constant, but moves down the curve.
d. remains constant, but moves up the curve.

Figure 6

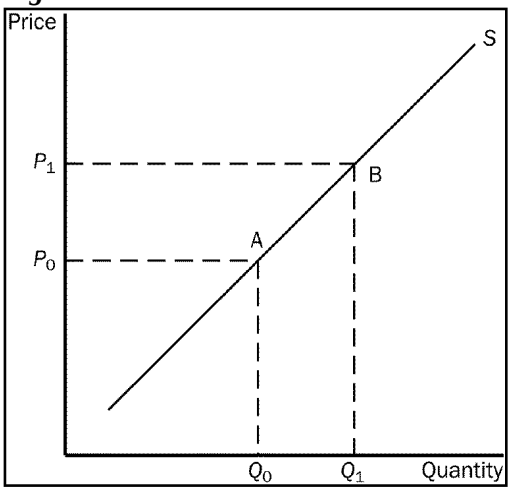


____ 23. **Refer to Figure 6**. The movement from D to D_1 could be caused by
a. an increase in price.
b. a decrease in the price of a complement.
c. an increase in technology.
d. a decrease in the price of a substitute. Qd for the other good increases so demand for this good decreases.

____ 24. Which of the following cause and effect events is in order for a seller?
a. Technology improves, profit falls, the supply curve shifts left.
b. An input price falls, profit increases, the supply curve shifts right.
c. An input price rises, profit falls, the supply curve shifts right.
d. An input price rises, profit rises, the supply curve shifts left.

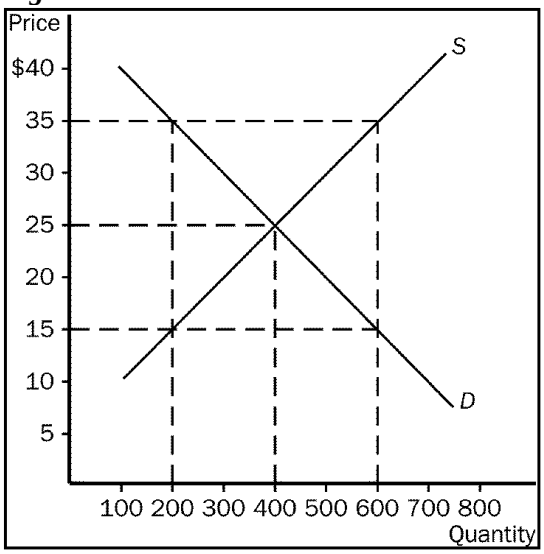
____ 25. Lead is an important input in the production of crystal. If the price of lead decreases, all else equal, we would expect the supply of
a. crystal to be unaffected.
b. crystal to decrease.
c. crystal to increase. Cost of producing crystal decreases so supply increases.
d. lead to increase.

Figure 7



____ 26. **Refer to Figure 7**. The movement from point A to point B on the graph is called
a. a decrease in supply.
b. an increase in supply.
c. an increase in the quantity supplied.
d. a decrease in the quantity supplied.

Figure 8



____ 27. **Refer to Figure 8**. Equilibrium price and quantity are
a. $35, 200.
b. $35 ,600.
c. $25, 400.
d. $15, 200.

____ 28. **Refer to Figure 8**. At a price of $35,
a. there would be a shortage of 400 units.
b. there would be a surplus of 200 units.
c. there would be a surplus of 400 units.
d. the market would be in equilibrium.

____ 29. Suppose roses are currently selling for $40.00 per dozen. The equilibrium price of roses is $30.00 per dozen. We would expect a
a. shortage to exist and the market price of roses to increase.
b. shortage to exist and the market price of roses to decrease.
c. surplus to exist and the market price of roses to increase.
d. surplus to exist and the market price of roses to decrease.

____ 30. Which chain of events occurs in the correct order?
a. Quantity supplied increases, price increases, demand increases.
b. Price increases, demand increases, quantity supplied increases.
c. Demand increases, price increases, quantity supplied increases.
d. Any of the above could be correct.

____ 31. Which of the following would definitely result in a higher price in the market for Snickers?
a. demand increases and supply decreases The other options depend on the relative magnitudes of the shifts so the change in price is ambiguous except for option a.
b. demand and supply both decrease
c. demand decreases and supply increases
d. demand and supply both increase

____ 32. Suppose that demand increases AND supply decreases. What would happen in the market for the good?
a. Equilibrium price would decrease, but the impact on equilibrium quantity would be ambiguous.
b. Equilibrium price would increase, but the impact on equilibrium quantity would be ambiguous. This follows from the previous question. What happens to Q depends on the size of the shifts.
c. Both equilibrium price and quantity would increase.
d. Both equilibrium price and quantity would decrease.

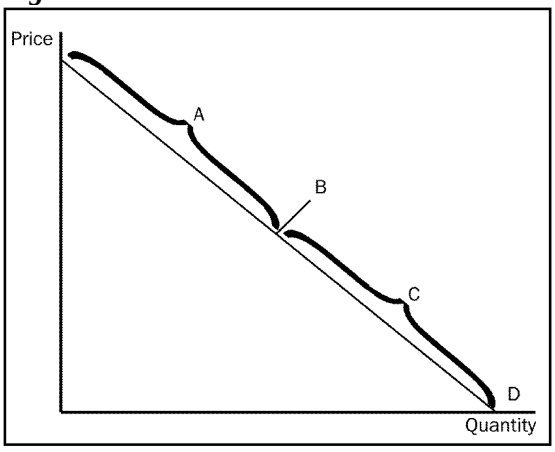
____ 33. The price elasticity of demand measures how responsive
a. buyers are to a change in income.
b. sellers are to a change in price.
c. buyers are to a change in price.
d. sellers are to a change in buyers' incomes.

____ 34. If a good is a necessity, demand for the good would tend to be
a. elastic.
b. horizontal.
c. unit elastic.
d. inelastic.

____ 35. 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. E = 8.88 >1 so elastic
c. unit elastic.
d. perfectly inelastic.

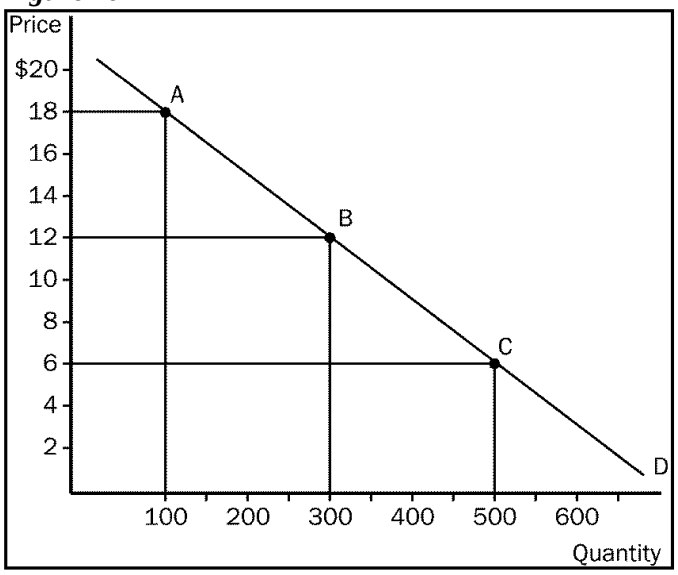
____ 36. If the price elasticity of demand for a good is 4.0, then a 10 percent increase in price would result in a
a. 4.0 percent decrease in the quantity demanded.
b. 10 percent decrease in the quantity demanded.
c. 40 percent decrease in the quantity demanded. 4 = %change in Q/10 so %change in Q = 40
d. 400 percent decrease in the quantity demanded.

Figure 9



____ 37. **Refer to Figure 9**. The section of the demand curve labeled A represents the
a. elastic section of the demand curve. Right out of lecture notes.
b. inelastic section of the demand curve.
c. unit elastic section of the demand curve.
d. perfectly elastic section of the demand curve.

Figure 10



____ 38. **Refer to Figure 10**. If the price decreased from $18 to $6, what would happen to total revenue?
a. Total revenue would increase by $1200 and demand would be elastic. TR at A is 1800 and at C, 3000, an increase of 1200. When P decreases and TR increases, demand is elastic.
b. Total revenue would increase by $800 and demand would be elastic.
c. Total revenue would decrease by $1200 and demand would be inelastic.
d. Total revenue would decrease by $800 and demand would be inelastic.

____ 39. Elasticity of demand is closely related to the slope of the demand curve. The more responsive buyers are to a change in price, the demand curve will be
a. steeper.
b. further to the right.
c. flatter. More elastic.
d. closer to the vertical axis.

____ 40. The smaller the price elasticity of demand the
a. closer the price elasticity of demand will be to the slope of the curve.
b. flatter the demand curve will be through a given point.
c. steeper the demand curve will be through a given point. Inelastic.
d. more equal the price elasticity of demand will be to the slope of the curve.

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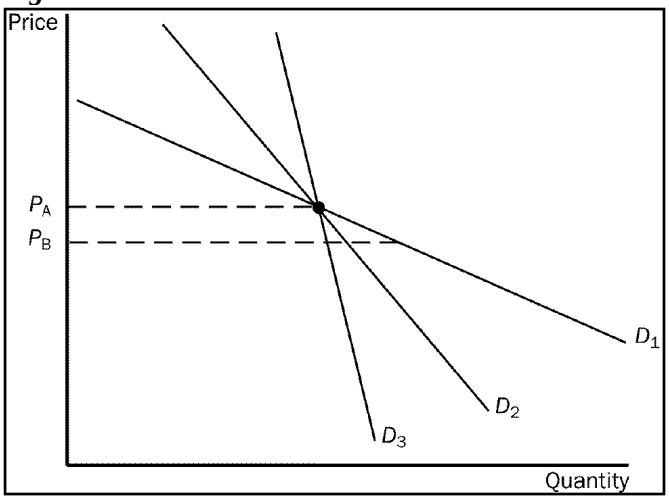
Figure 11



____ 41. **Refer to Figure 11**. As price falls from P_A to P_B, which demand curve is most elastic?
a. D_1
b. D_2
c. D_3
d. All of the above are equally elastic.

____ 42. An increase in price causes an increase in total revenue when
a. demand is elastic.
b. demand is inelastic.
c. demand is unit elastic.
d. All of the above are possible.

____ 43. When demand is elastic in the current price range,
a. an increase in price would increase total revenue because the decrease in quantity demanded is less than the increase in price.
b. an increase in price would decrease total revenue because the decrease in quantity demanded is greater than the increase in price.
c. a decrease in price would decrease total revenue because the increase in quantity demanded is smaller than the decrease in price.
d. a decrease in price would not affect the total revenue.

____ 44. 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
a. negative and therefore pizza is an normal good.
b. negative and therefore pizza is a inferior good.
c. positive and therefore pizza is an inferior good.
d. positive and therefore pizza is a normal good.

Table 2

Income	Quantity of Good X Purchased	Quantity of Good Y Purchased
$30,000 I1	2	20 Q1
$40,000 I2	5	10 Q2

____ 45. **Refer to Table 2**. Using the midpoint method, what is the income elasticity of good Y?
a. -3.33
b. -2.33
c. 1.33
d. 2.33

____ 46. **Refer to Table 2**. Good X is
a. very price elastic.
b. an inferior good.
c. underpriced.
d. a normal good. I increases and Qx increases.

____ 47. If two goods are substitutes, their cross-price elasticity will be
a. positive. As P of one increases, demand for the other increases.
b. negative.
c. zero.
d. 1.

____ 48. The main determinant of the price elasticity of supply is
a. time. Right out of lecture notes.
b. the definition of the market.
c. the number of close substitutes.
d. luxuries vs. necessities.

____ 49. If a consumer is willing and able to pay $20.00 for a particular good but only has to pay $14.00, the consumer surplus is
a. $6.00.
b. $14.00.
c. $20.00.
d. $34.00.

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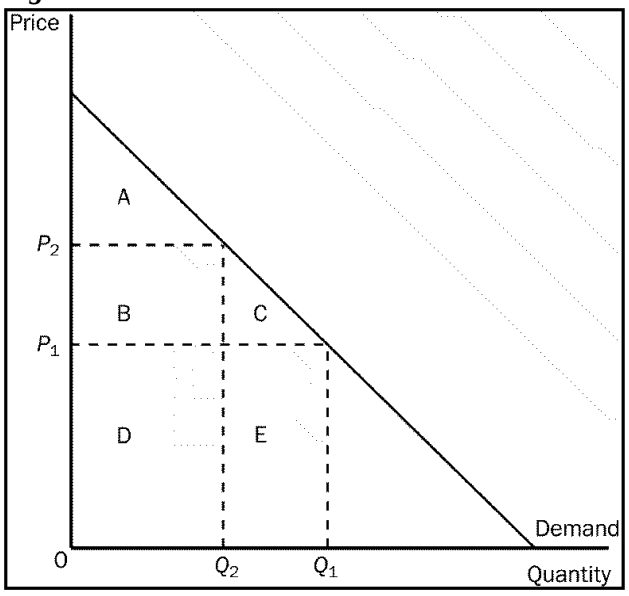
Figure 12



____ 50. **Refer to Figure 12**. When the price is P_1, consumer surplus is
a. A
b. A + B
c. A + B + C Area under demand curve above price
d. A + B + D

____ 51. Externalities are
a. side effects passed on to a party other than the buyers and sellers in the market.
b. external forces that help establish equilibrium price.
c. external forces that cause the price of a good to be higher than it otherwise would be.
d. side effects of government intervention in markets.

____ 52. Orange juice and apple juice are substitutes. Bad weather that sharply reduced the orange harvest would
a. increase consumer surplus in the market for orange juice but decrease producer surplus in the market for apple juice.
b. increase consumer surplus in the market for orange juice and increase producer surplus in the market for apple juice.
c. decrease consumer surplus in the market for orange juice but increase producer surplus in the market for apple juice. Draw this. Supply shifts back, so P increases, reducing CS bur increasing PS.
d. decrease consumer surplus in the market for orange juice and decrease producer surplus in the market for apple juice.

QUESTIONS # 53 – #60 ON THE FOLLOWING PAGE REFER TO THE ORIGINAL INFORMATION IN QUESTION #53.

____ 53. Demand and supply for ink cartridges are given as Qd = 100 - 2P and Qs = 10 + P. Equilibrium price and quantity are

100 – 2 P = 10 + P
90 = 3P
P = 30 , Q=40

a. $50; 50
b. $40; 30
c. $30; 40
d. $25, 35.

____ 54. If P = $20, there would be a

At P=20, Qd = 60, Qs=30

a. surplus equal to 30 cartridges
b. shortage of 30 cartridges
c. shortage of 60 cartridges
d. new equilibrium at Q = 30.

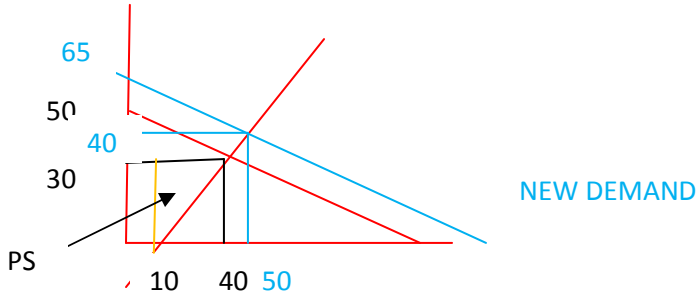
____ 55. A change in consumers' tastes leads to a new demand given by Qd' = 130 - 2P. This results in a new equilibrium price and quantity of 130-2P=10+P

120=3P

P=40, Q=50

a. $40; 50
b. $50; 40
c. $60; 30
d. $46.67; 56.67.

____ 56. Referring to the original demand and supply, producer surplus equals



PS=.5*30*30=450

a. $600
b. $750
c. $450
d. $800.

____ 57. After the change in demand, consumer surplus

Original CS= .5*20*40=400

After, CS=.5*25*50=625 an increase of 225

a. increased by $400
b. increased by $625
c. increased by $550
d. increased by $225.

____ 58. Which is more elastic?

a. Demand it's flatter
b. supply
c. both have the same elasticity
d. insufficient information to determine.

____ 59. The new equilibrium, using the new equation for demand, is the result of an

a. increase in demand and an increase in supply
b. increase in demand and an increase in quantity supplied
c. increase in quantity demanded and an increase in supply
d. increase in quantity demanded and an increase in quantity supplied.

____ 60. Referring to the original demand equation , at a price of $25, a seller should

a. increase price to increase total revenue
b. decrease price to increase total revenue
c. do nothing since total revenue is maximized At P=25, at midpoint of D where TR is max(E=1)
d. buy a guard dog.

____ 61. Who holds the NFL record as most game-winning quarterback?

a. John Elway
b. Brett Favre
c. Dan Marino
d. Troy Aikman