

ECONOMICS 1021a
MID-TERM EXAM
 King's University College

Fall Term 2010

Name: _____

Instructor: Prof. T. Osborne

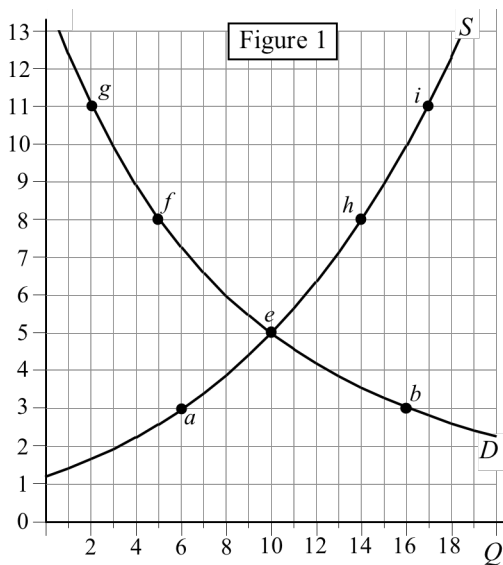
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MULTIPLE CHOICE (38 marks — 1 mark each)

WRITE YOUR ANSWERS IN THE GRID ON THE TOP OF PAGE 3

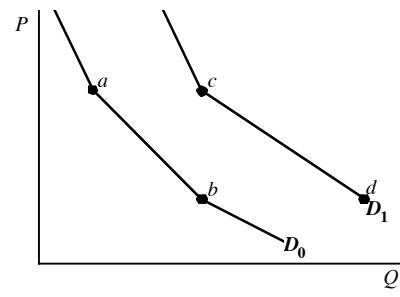
1. Which of the following concepts is important in economics:
 a) choice b) opportunity cost c) scarcity d) all of them e) a) and b)
2. Goods have prices because:
 a) we use money b) the government sets prices c) of advertising d) accounting uses them e) there is scarcity

Questions 3, 4, 5, 6, 7 and 23 refer to **Figure 1** below which represents the market for **Good X**.



3. A movement from point *e* to point *g* would be referred to as:
 a) a decrease in demand c) a decrease in quantity demanded
 b) an increase in demand d) an increase in quantity demanded
 e) none of the above
4. Which of the following might change as we go from point *b* to point *e* :
 a) price of other goods c) income e) none of these
 b) the characteristics of good *X* d) population
5. A movement from point *h* to point *a* would be referred to as:
 a) a decrease in supply c) a decrease in quantity supplied
 b) an increase in supply d) an increase in quantity supplied
 e) a decrease in quantity demanded
6. Which of the following is true:
 a) At $P=\$11$ there is an excess demand of 15 of good *X*.
 b) At $P=\$8$ the quantity demanded is 14 of good *X*.
 c) At $P=\$8$ there is a shortage of 9 of good *X*.
 d) At $P=\$3$ there is a surplus of 10 of good *X*.
 e) At $P=\$3$ there is an excess demand of 10 of good *X*.
7. We will have equilibrium in this market when :
 a) $P=\$3, Q=16$ b) $P=\$3, Q=6$ c) $P=\$5, Q=10$ d) $P=\$10, Q=5$ e) none of the above
8. A change in which of the following will not shift the demand curve for a particular good:
 a) population c) the price of this good e) the price of some other good
 b) average income d) the quality this good
9. Which of the following means exactly the same as “a change in demand”:
 a) a movement along a demand curve c) a change in quantity demanded e) a) and b)
 b) a shift in a demand curve d) all of the above

10. In the diagram at right, a movement from point *c* to point *a* followed by a movement from point *a* to point *b* would be referred to as a decrease in:
 a) quantity demanded followed by a increase in demand
 b) demand followed by an decrease in quantity demanded
 c) demand followed by a additional decrease in demand
 d) demand followed by an increase in quantity demanded
 e) quantity demanded followed by a decrease in demand



11. Which of the following will shift the supply curve for a particular good:
a) price changes caused by a shortage c) buyers find they like the good much more e) none of the above
b) price changes caused by a surplus d) all of the above
12. Excess demand occurs when the price is :
a) above the equilibrium price b) excessive c) below the equilibrium price d) in equilibrium e) too high
13. In a supply-demand type market, many sellers will wish to change the price:
a) when the market is in equilibrium c) when the market is in excess supply e) b) or c)
b) when the market is in excess demand d) rarely, since sellers usually prefer a stable price
14. Suppose equilibrium quantity decreases and the equilibrium price decreases as well. Then:
a) there must have been a shift in supply to the left. d) there must have been a shift in demand to the left.
b) there must have been a shift in supply to the right. e) this is impossible. Supply and demand analysis
c) there must have been a shift in demand to the right. predicts that quantity falls when price rises.
15. Which of the following statements is correct? (Be sure to draw diagrams to help you). If supply shifts
a) left and demand does not shift then equilibrium price will fall d) right and demand shifts right also, then
b) right and demand does not shift then equilibrium price will rise equilibrium quantity will fall
c) right and demand shifts left then equilibrium price will fall e) none of the above
16. Suppose that two things occur this fall: new studies show that apples help prevent flu and perfect weather increases the supply of apples. Which of the following would we expect to occur in the market for apples:
a) more will be purchased at higher prices d) less will be purchased at higher prices
b) less will be purchased but prices might rise or fall e) more or less might be purchased at higher prices
c) more will be purchased but prices might rise or fall
17. Which of the following statements is true concerning price controls:
a) a price ceiling usually comes about after the demand curve in a market shifts to the left.
b) when there is a price ceiling the government usually makes the sellers sell more than they want to.
c) the government usually attempts to control the price as close to the equilibrium as possible.
d) when there is a price floor it is illegal to buy and sell at a price above the set price
e) a price control in a market is usually initially suggested by politicians, not by economists
18. Concerning price controls, we said that:
a) as time goes on, people accept them and give up trying to get around them d) they become less effective over time
b) they usually meet the goal for which they were designed e) all of the above are true
c) they save people from the effort normally needed to participate in a market
19. One example of a market in which there has been a price floor that we discussed in class was:
a) apartment rentals in Ontario b) Canadian trucking c) used cars d) clothing e) a) and b)
20. Which of the following statements was made during our discussion of price controls:
a) marketing boards make farmers produce more c) minimum wage laws cause some unemployment
b) marketing boards keep prices lower to help consumers d) without marketing boards farmers would make more profit
e) rent control benefits most new people moving into Ontario
21. Which of the following did we say concerning the effects of the B.C. Milk Marketing Board in 1975. It:
a) kept price above equilibrium c) caused an excess supply of milk e) a) and b)
b) charged farmers a membership fee d) all of the above
22. If price goes up by 10% and quantity demanded goes down by 25% then the elasticity of demand is:
a) .25 b) .40 c) 15% d) -25 e) 2.5
23. In Figure 1 (on page 1), between point *e* and point *b* the elasticity of demand is approximately:
a) .75 b) .92 c) 1.0 d) 1.08 e) 3.0

D	E	C	E	C	E	C	C	B	D	E	C	E	D	C	C	E	D	B	C	D	E	B	D	D	B	D	E	C	C	E	D	A	D	C	E	C	E
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38

24. For a commodity with an elasticity of demand of .5 we could conclude:

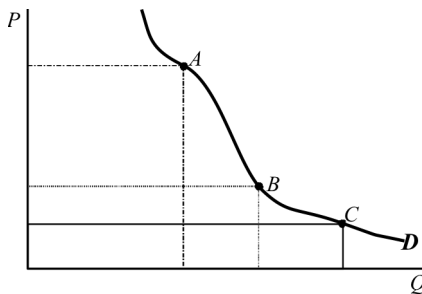
- a) people find it relatively difficult to substitute other goods for this good when its price increases
- b) any percentage change in price would be twice the corresponding percentage change in quantity demanded
- c) demand is elastic
- d) a) and b)
- e) b) and c)

25. About the elasticity of demand we can say:

- a) all demand curves are elastic but some are more elastic than others
- b) if one portion of a demand curve looks steeper than another portion, then the steeper portion must be less elastic.
- c) a demand curve with an elasticity of 1.0 everywhere will be a straight line
- d) a demand curve with an elasticity of .5 everywhere cannot be a straight line
- e) the elasticity of demand uses a different method for calculating percents than the elasticity of supply does

26. The elasticity of demand for a good is 1.5 and price falls. Then quantity demanded will:

- a) rise and total revenue will fall
- b) rise and total revenue will rise
- c) fall and total revenue will rise
- d) fall and total revenue will fall
- e) any of the above could occur



27. The area (or size) of each of the three boxes in the diagram at left is equal to:

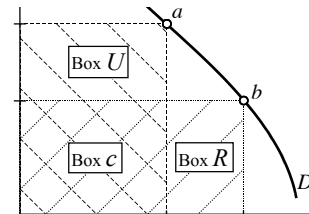
- a) price
- b) quantity
- c) slope
- d) total revenue
- e) elasticity

28. For the demand curve marked ABC in the diagram, between A and B the curve:

- a) is approximately unitary and elastic between B and C
- b) is approximately unitary and inelastic between B and C
- c) is elastic and is elastic between B and C
- d) is inelastic and is elastic between B and C
- e) is inelastic and inelastic between B and C also

29. Suppose that, in the diagram shown at right, $\text{Box } U = 40$, $\text{Box } c = 64$ and $\text{Box } R = 32$. Then the elasticity of demand between points a and b is approximately:

- a) .5
- b) .625
- c) .8
- d) 1.25
- e) 1.6



30. A straight line demand curve will have elasticity of .75:

- a) everywhere on the line
- b) in the upper left half of the line
- c) in the lower right half of the line
- d) around the mid-point of the line
- e) nowhere on the line

31. A demand curve which has an elasticity of 1.5 all the way along it:

- a) will be a straight line
- b) cannot be drawn
- c) will have the same TR everywhere along it
- d) will have higher TR as price goes up
- e) none of these are true

32. When we say that supply is perfectly inelastic we mean:

- a) $\eta_s = 1$
- b) $\eta_s > 1$
- c) $\eta_s < 1$
- d) $\eta_s = 0$
- e) $\eta_s \rightarrow \infty$

33. A constant elasticity demand curve has $\eta = 2$ and initially has $Q = 16$ when $p = 5$. What is the equation for the demand curve?

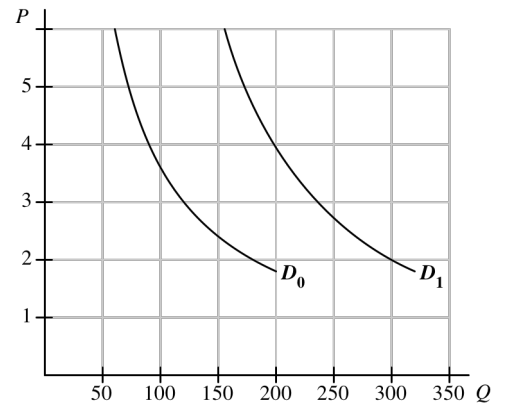
- a) $Q = \left(\frac{400}{p^2}\right)$
- b) $Q = \left(\frac{400}{p}\right)$
- c) $Q = \left(\frac{80}{p^2}\right)$
- d) $Q = \left(\frac{400}{\sqrt{p}}\right)$
- e) $Q = \left(\frac{80}{\sqrt{p}}\right)$

34. There is a shift in supply of a commodity and we observe, after the new market price is determined, that price changes by 15% and quantity changes by 30%. The elasticity:

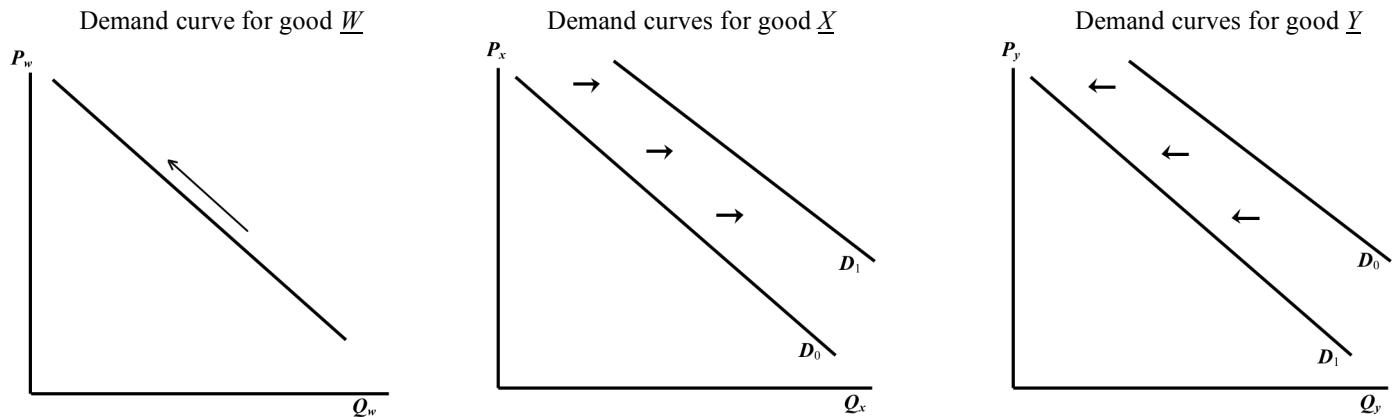
- a) of supply is 0.5.
- b) of supply is 2.0.
- c) of demand is 0.5.
- d) of demand is 2.0
- e) is 2.0 but there isn't enough information to tell whether it's the elasticity of supply or demand

Questions 35 and 36 use the demand curves for good X shown at right:

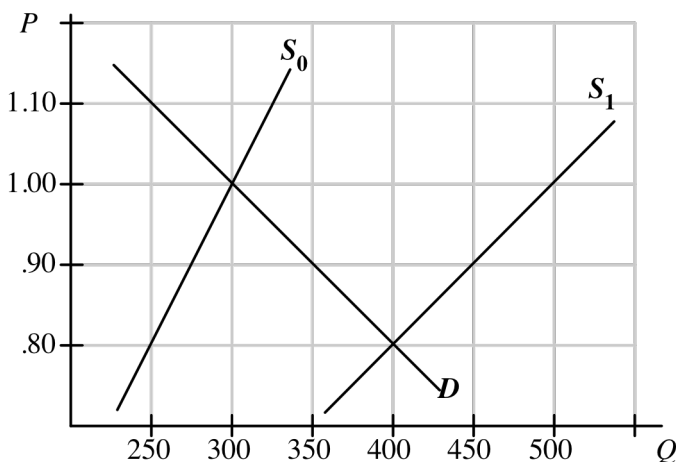
35. Comparing demand curves D_0 and D_1 we can say:
- they have the same elasticity because they are parallel
 - they are both straight line demand curves
 - they are both constant elasticity demand curves
 - both a) and b) are true
 - both a) and c) are true
36. Comparing demand curves D_0 and D_1 we can say that D_0 :
- is elastic everywhere on the curve and so is D_1
 - is elastic on the top half of the curve and so is D_1
 - is inelastic everywhere on the curve and so is D_1
 - has unitary elasticity everywhere on the curve and so does D_1
 - has unitary elasticity everywhere on the curve, D_1 is inelastic everywhere



Questions 37 and 38 refer to the diagrams below:



37. An increase in the price of good W (as shown by the arrow in the leftmost diagram) shifts the demand curves for goods X and Y from D_0 to D_1 (as shown by the arrows in the two diagrams on the right). Then:
- X is a normal good, Y is an inferior good.
 - X and Y are complements.
 - X and W are substitutes, Y and W are complements.
 - Y and W are substitutes, X and W are complements.
 - a) and d) are both true.
38. An income change shifts the demand curves for goods X and Y from D_0 to D_1 (as shown by the arrows in the diagrams).
- If income rose then X must be a normal good, Y an inferior good.
 - If income fell then X must be a normal good, Y an inferior good.
 - If income fell then X must be an inferior good, Y a normal good.
 - Both a) and b) are true.
 - Both a) and c) are true.



EXERCISE & ESSAY (12 marks)

Explain how a supply-demand type market adjusts to a change in supply.

Use numerical and graphical examples in your answer taken from the diagram given at left. Mark and label points on the diagram in any way you wish, referring to your labels in your essay.

As an example, suppose that P is the price of gasoline in Ontario over the last two years. The actual price was \$1.00 in October 2008, \$.80 in March 2009 and \$1.00 in October 2010.

(Q = millions of litres per week)
(P = price per litre)