

101LON - The Economic Environment of Business

Dr Nikolaos Tzivanakis
Seminar 2

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1 The Demand Side of the Market

Please attempt to answer or solve all the following questions. If you require any assistance ask in class.

1.1 Question 1

- What are the assumptions of the market model?

1.2 Question 2

Create the demand schedule for the following equations and then draw their corresponding demand curve:

a. $Q_1 = 2 - P$ P is equal to $[0, 0.4, 0.8...2]$

b. $Q_2 = 18 - 3P$ $P \in [0, 6]$

c. $Q_3 = 8 - 0.8P$ $P \in [0, 10]$

Discuss the meaning of the intercept and the slope parameter in these equations.

1.2.1 Hint

First, plug in the numbers to calculate the demand schedule and then place the points in a simple XY graph. Remember to label your axes correctly.

1.3 Question 3

George, Nancy and Dimi have a different demand schedule for milk. Based on the information given in Table 1 below calculate the market demand (assuming the market consists of the 3 individuals) and then try to derive the demand equation for the three individuals and the market's one.

Table 1: From Individuals to Market

Price	George	Nancy	Dimi	Market
0	15	10	11	
0.5	13.5	9	9.75	
1	12	8	8.5	
1.5	10.5	7	7.25	
2	9	6	6	
2.5	7.5	5	4.75	
3	6	4	3.5	
3.5	4.5	3	2.25	
4	3	2	1	
4.5	1.5	1	0	
5	0	0	0	

1.3.1 Hint

Calculate the market quantity. You know what the demand equation looks like ($Q = a - bP$). The table gives you information for Q and P , all you need is to calculate the intercept and the slope.

1.4 Question 4

Draw the demand curve for burgers and demonstrate in your graph what will happen in the following cases:

- Your income increases.
- The price of pizza goes down.
- The World Health Organisation announces that the consumption of burgers increases health risk.
- The price of the burger decreases.
- The price of potatoes goes up.

1.4.1 Hint

Make sure that you label your graph correctly. Think carefully about the movement; does the whole curve move or we move along the curve.

1.5 Question 5

- What are the three types of goods?
- Discuss the properties of the three types of goods.

1.5.1 Hint

Focus on the behaviour of the good in relation with the law of demand and income changes.

2 Background to Demand

2.1 Question 1

Draw your indifference curve for wine and cheese. List and discuss the 4 main properties of the indifference curve.

2.1.1 Hint

Make sure that you clearly label your graph. Think about how each of the properties affects the graph.

2.2 Question 2

A consumer has income of £1200. The price of a glass of wine is £3 and cheese costs £8 per kilo:

- a. Draw the budget line.
- b. Income increases by £300 draw the new BC.
- c. Following the increase income of part (b.) a glass of wine now costs £5, draw the BC.

2.2.1 Hint

Make sure that you clearly label your graph. Also, make sure that it is clear where the point of optimum consumption is on your graph in every case. Think about how each change affects your consumption.

2.3 Question 2

Draw a budget line and an indifference curve for pizza and cola. Show what will happen to the budget line, and therefore to the optimum point if:

- a. the price of the pizza goes up.
- b. your income increases.
- c. the price of the cola goes down.

2.3.1 Hint

Make sure that you clearly label your graph. Also, make sure that it is clear where the point of optimum consumption is on your graph in every case. Think about how each change affects your consumption.

3 MCQ

1. *In the market for haircuts, demand is determined by:*
 - a. the buyers of haircuts.
 - b. both the buyers and sellers of haircuts.
 - c. the sellers of haircuts.
 - d. the government.

2. *Refer to the Figure below. If Consumer A and Consumer B are the only consumers in the market, then the market quantity demanded when the price is \$6 is*
 - a. 10 units.
 - b. 16 units.
 - c. 2 units.
 - d. 12 units.



3. *Good X is a(n) ... if the consumer buys more of it when*
....
 - a. normal good; the price of X increases
 - b. normal good; income decreases
 - c. inferior good; income decreases
 - d. inferior good; the price of X increases

4. *Which of the following changes would not shift the demand curve for gas?*

- a. Senior citizens incomes increase due to a change in social security benefits.
- b. The price of gas is expected to increase in near future due to decreased production.
- c. The price of gas decreases due to increased production.
- d. The price of gas-powered cars increases due to higher steel prices.

5. *If generic medicine is an inferior good, then an increase in*

- a. the price will cause the demand curve for generic medicine to shift to the left.
- b. a consumer's income will cause the demand curve for generic medicine to shift to the left.
- c. the price of the brand name equivalent will cause the demand curve for generic medicine to shift to the left.
- d. a consumer's income will cause the demand curve for the brand name equivalent to shift to the left.

6. *The US government announces that next month it will offer tax rebates on new energy efficient windows. As a result of this information, today's demand curve for energy efficient windows*

- a. shifts to the right.
- b. will not shift; rather, there is a movement downward and to the right along the demand curve for energy efficient windows.
- c. shifts to the left.
- d. will not shift; rather, there is a movement upward and to the left along the demand curve for energy efficient windows.

7. *The slope of the budget constraint is determined by the consumer's preferences.*

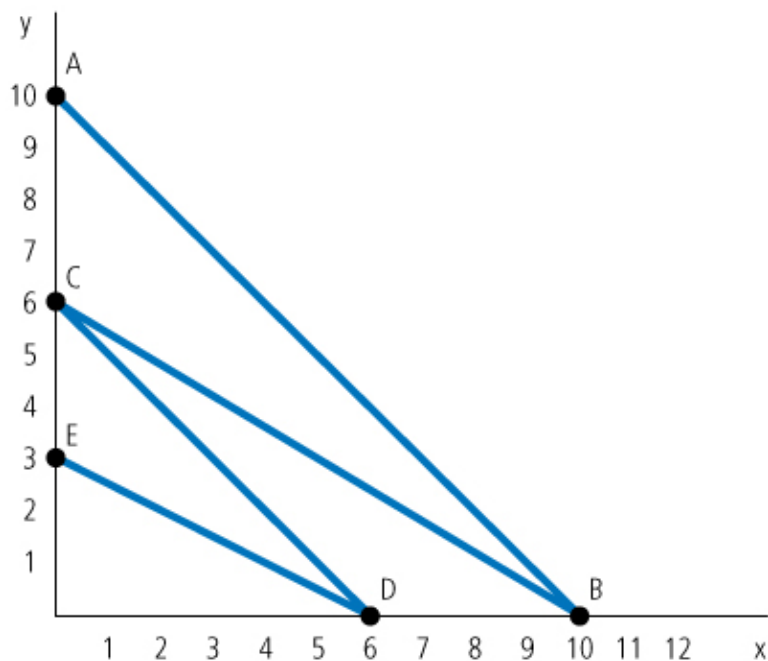
- a. True
- b. False

8. *Faith, Hope, and Joy each buy hot chocolate and paperback novels to enjoy on cold winter days. Hot chocolate costs \$3 per box, and paperback novels cost \$12 each. Faith has a budget of \$60, Hope has a budget of \$50, and Joy has a budget of \$40 to spend on hot chocolate and paperback novels. Who can afford to purchase 4 boxes of hot chocolate and 3 paperback novels?*

- a. None of the women
- b. Faith and Hope only
- c. Faith only
- d. All of the women

9. *Refer to the Figure below. You have \$180 to spend on good X and Y. If good X costs \$30 and good Y costs \$60, your budget constraint is*

- a. DE.
- b. BC.
- c. AB.
- d. CD.



10. *Refer to the Figure below. What is the consumer's marginal rate of substitution as she moves from A to B?*

- a. -6
- b. -4
- c. -3
- d. -12

