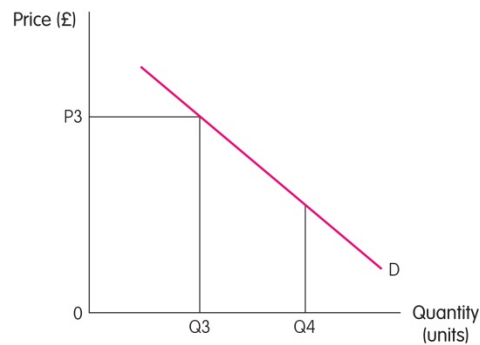


# Chapter 3

## Put into practice questions

Page 47

Consider the demand curve in Figure 3.2.



**What quantity is demanded at price P3?**

Answer Q3

**What price is necessary for quantity Q4 to be demanded?**

Lower price

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**According to the law of diminishing marginal utility states that .**

- As more variable factors are added to a fixed factor, the additional output produced will decline. FALSE
- As more of a product is consumed, the extra satisfaction will decline. TRUE
- As more of all factors are employed, the additional output produced will fall. FALSE
- The total satisfaction from consuming a product will be maximised when marginal utility is negative. FALSE

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**If the equation for a demand curve is  $Q = 50 - 4P$ :**

**a. what is the quantity demanded if the price is £5?**

$=50-20= 30$  units

**b. what is the quantity demanded if the price is £10?**

$=50-40= 10$  units

**c. what is the price at which the quantity demanded is 46 units?**

If  $Q = 46$  ;  $4P = 4$ ;  $p = £1$

**d. what is the price at which the quantity demanded is 42 units?**

If  $Q = 42$ ;  $4P = 8$ ;  $p = £2$

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**If the equation for a demand curve is  $Q = 20 + 2P$ , why does this mean that the demand curve for this product is upward-sloping? Show your answer, using calculations to calculate the quantity demanded for different prices.**

Demand is upward sloping; if price increases quantity demanded increases e.g. price = £1 Quantity demanded=  $20+2=22$  units  
if price= £2; Quantity demanded =  $20 + 4= 24$  units

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**What do you think are likely to be the major determinants of the demand for each of the following?**

- a. New cars: could be income, and population size
- b. Textbooks : could be number of students
- c. Diamonds: could be incomes and number of weddings
- d. Healthcare: could be population size and age breakdown
- e. Flat screen TVs: income
- f. Eggs: population size; eating habits

**Complete the table below showing the demand curves for the three firms in the market.?**

Price	Quantity demanded from firm A units	Quantity demanded from firm B units	Quantity demanded from firm C units	Market demand (A + B + C) units
10	50	20	8	
8	60	35	23	
6	80	45	34	
4	100	56	45	

**Price Market demand**

10            78  
8             118

6            159  
4            201

## End of chapter put into practice questions

Page 64

**If the equation for the demand curve is  $Q = 300 - 2P$  what is the quantity demanded when the price is £10? £20?**

Price £10; quantity demanded =  $300 - 20 = 280$  units

Price = £20; quantity demand =  $300 - 40 = 260$  units

**Show on a diagram the effect of a demand curve changing from  $Q = 200 - 4P$  to  $Q = 500 - 4P$ .**

Demand shifts outwards

**What happens to a demand curve if it changes from being  $Q = 600 - 3P$  to  $Q = 600 - 8P$ ?**

Demand shifts inwards

**What does a demand curve look like if its equation is  $Q = 100 + 2P$ ?**

Upward sloping

**The marginal utility for each additional unit of consumption is 12 units of utility then 10, 7, 5, 2, -2, -4. Plot the total utility derived from the consumption of these units.**

Total utility will be: 12, 22, 29, 34, 36

**Complete the table below.**

Unit	Total utility	Marginal utility
1	20	n/a
2	30	
3	55	
4	76	
5	97	

Marginal utility is: 10, 25, 21, 21.

**Complete the table below showing the demand curves for the three firms in the market.**

Price	Quantity demanded from firm A	Quantity demanded from firm B	Quantity demanded from firm C	Market demand (A + B + C)
	units	units	units	units
20	20	2	9	
18	30	5	23	
16	40	15	44	
14	70	16	55	

Total demand is: 31, 58, 99, 141.