Price Elasticity of Demand

Definition:

Measure of responsiveness of quantity demanded given a change in price.

$$PED = \frac{\% \Delta QD}{\% \Delta P}$$

$$\% \text{ change} = \frac{\text{change}}{\text{original}} \times 100$$

The PED value will ALWAYS be negative because there is an inverse relationship in the price and quantity demanded.

Price of Bus Tickets	Quantity Demanded
100p	1,000
60p	1,300
30p	2,275

① Find the PED of the fall in the price of bus tickets from 100p to 60p.

$\% \Delta QD$ $\qquad$ $\% \Delta P$

$\frac{300}{1000} \times 100 = 30\%$ $\qquad$ $\frac{-40}{100} \times 100 = -40\%$

$= -40\%$

$$PED = \frac{30}{-40} = -0.75$$

However we ignore the minus sign.

- >1 price elastic
- <1 price inelastic
- $=1$ unitary elasticity
- $=0$ perfectly inelastic
- $=\infty$ perfectly elastic

② What does the PED show from the fall in price from 100p to 60p?

- 0.75 shows that the demand is price inelastic.
- Demand does not respond greatly to a change in price.
- The ~~[illegible]~~ demand changes less than proportionally to the change in price.

What is Economics?

The study of how to allocate resources that are limited in the most effective way.

The Basic Economic Problem:

The definition: how to allocate scarce resources among alternative uses

The basic economic problem is that we have limited factors of production but unlimited wants. Therefore, this leads to having choices to be made

Household: group of people whose spending decisions are connected

Factors of production are the means by which an economy produces a whole range of goods and services to meet the needs of its population. There are four main types of factors of production:

1. Land -

This is the natural resource which includes a variety of things such as mineral deposits like oil and coal, the earth's rivers and lakes and the land itself, in terms of the quality of the soil for agriculture and availability of trees and vegetation. Land can also be used to describe natural resources such as sea, sand and sun that are important for the development of tourism and leisure activities.

2. Labour -

This is the human resource that is available in any economy. Quantity and quality are essential in terms of labour. The world's poorest countries often have large populations but suffer from a lack of skilled and educated workforce. Other countries e.g. Germany and Italy have declining populations and have to rely

on immigrant workers to do both skilled and unskilled jobs.
The quality of labour is essential for economic progress, as showed by the growing importance of India in the global economy.

3. Capital -

This is a form of physical resource covering anything that can be regarded as a man-made aid for production. The function of capital is that it's combined with land and labour to produce goods and services that are required by the population. It covers a wide range of items such as factories, machinery, ICT, infrastructure e.g. roads, electricity supplies... etc or transport vehicles.

4. Entrepreneurship -

This is a very particular form of human capital. It has two functions; it refers to enterprise whereby the other factors of production are organised in order to produce goods and services. Secondly, it refers to the ability of those who are prepared to take risks in order to make a profit.

The world's poorest countries tend to have few or poor quality factor endowments, while the most prosperous economies, such as the US, have invariably exploited their factors of production for substantial economic development.
One explanation for the huge inequalities of countries is because of factor endowment.

Poorer countries wants are different to rich countries wants.
Clothing and housing for poorer countries can be regarded as wants whereas richer countries may want more designer clothing. This also raises the issue of choice

therefore we must choose what to produce, how to produce it and who to produce it for.

<u>Goods and Services</u>

Goods are tangible whereas services are intangible acts done to or for a person. Economic goods incur an opportunity cost whereas free goods do not. Free goods include air and by products such as pollution.

<u>Economic Agents</u>

The ~~usual~~ traditional economic theory suggests that most of us are rational and pursue <u>maximising</u> behaviour. Economic agents are the decision makers in the economy, and they include, consumers, workers, firms and government.

Consumers aim to <u>maximise utility</u> for pleasure or happiness. Thus every decision we make about what to spend our limited budget on comes at an <u>opportunity cost</u>. Workers aim to ~~maximum~~ maximise wages and other benefits by choosing to work in an industry where they are most rewarded for their skills. Firms aim to maximise profits. Profit is the reward to entrepreneurs for risk taking. Governments aim to maximise social welfare.

Specialisation and the Division of Labour

As economies develop, the level of specialisation tends to increase. Adam Smith identified the importance of specialisation. Specialisation allows workers to improve their efficiency and productivity as they perform relatively small tasks over again. Specialisation requires a system of exchange. This exchange may be organised by the government but usually

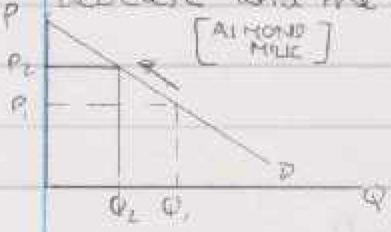
THE PRICE OF OTHER ~~FACTORS~~ PRODUCTS

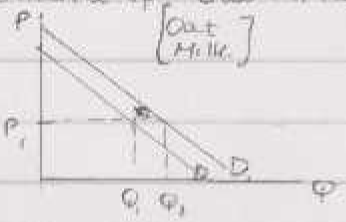
Substitutes - other goods

Complements - goods for which there is a joint demand

Substitutes

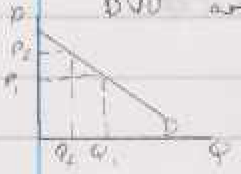
If the price of Almond Milk increases, the quantity demanded will decrease and the demand of Oat Milk will increase.





Complements

DVD and DVD player



Demand will decrease for DVD players because demand for DVDs has decreased.

Tastes and fashion

Firms advertise in order to make their products more desirable thus increasing/shifting demand. Fashions affect demand for e.g. for teenagers, having the latest and most popular phones are important which would shift the demand curve to the right.

A change in demand due to a change in non-price factors.

The factors explained above shift the demand curve to the right. This means that a different amount of the good or service is now demanded at the same price.

Change due to	effect
↑ in Y	shift →
↑ in price of substitutes	shift →
↓ price of complements	shift →
positive change in tastes + fashion	shift →

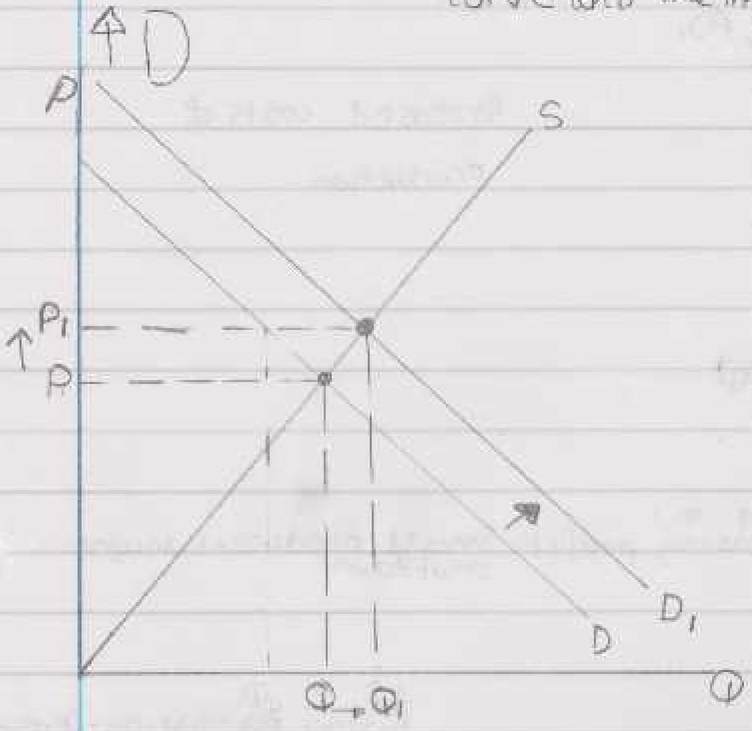
Activity

a) ↓ Demand

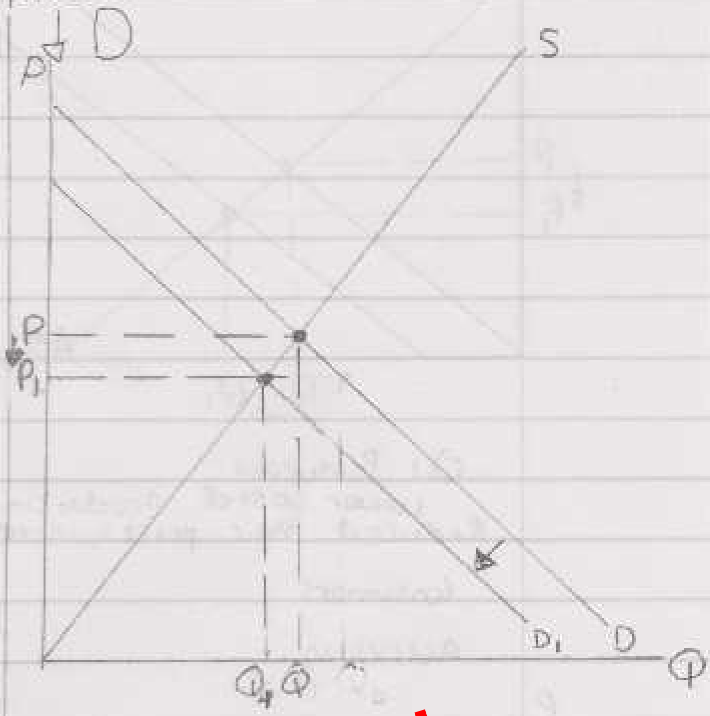
b) ↑ Demand

c) ↓ Demand

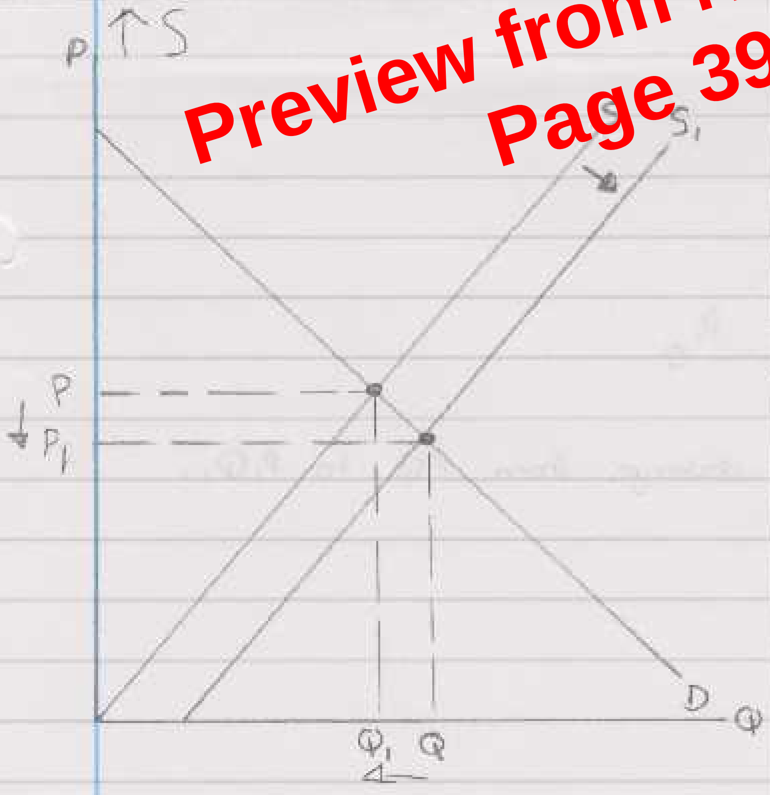
Shifts of the demand and supply curve and the impact on



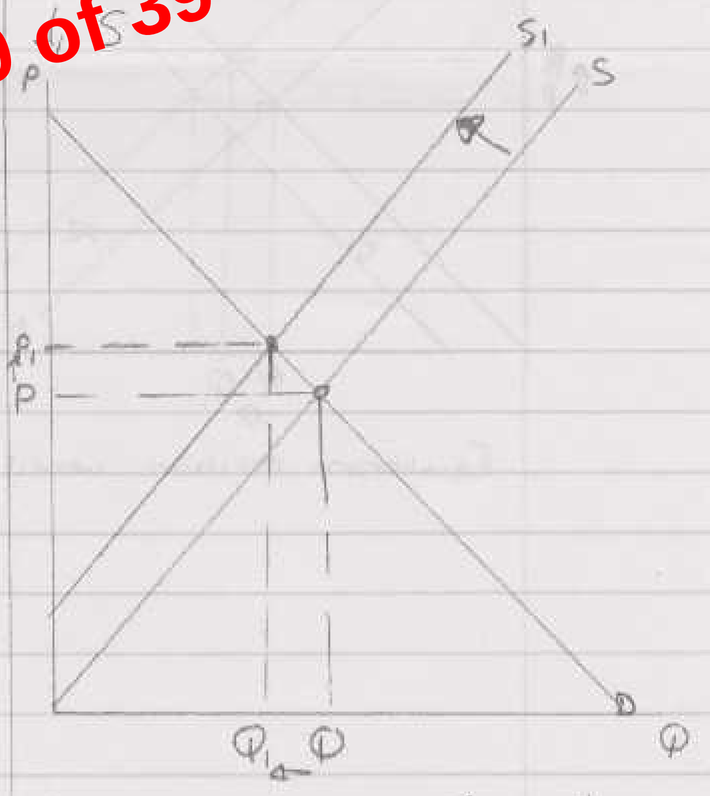
As demand ↑, price ↑ and Q ~~is higher than Qo~~. increases.



As demand ↓, price ↓ and ~~Q is higher than~~ Qs Quantity ↓.



As supply ↑, price ↓ and quantity decreases.



As supply ↓, price ↑ and Quantity ↓.