AAU - Microeconomics (ECO 120/2) - Spring 2010

1. ELASTIC or INELASTIC?

price elasticity of demand = (percentage change in demand)/(percentage change in price)

Use the formula above to calculate values of Price Elasticity for all the situations below:

Old P	New P	Old Q	New Q	% change in Q_D	% change in P	Elasticity
25	30	100	40			
40	70	120	90			
200	220	80	64			
50	75	150	135			

In each case identify whether you would describe it as elastic / unit elastic / inelastic:

1.................................

2.................................

3.................................

4.................................

2. ELASTICITY and TOTAL REVENUE

Different elasticity values will lead to different effects on the level of total revenue a firm receives. For example, if a good is elastic and a firm increases the price, by say 10%, they will lose more than 10% of their business, and so although they are getting more money for each one they sell, they are selling far fewer.

To see the effect that elasticity has on total revenue fill in the table below:

Old P	New P	Old Q	New Q	Old TR	New TR	Elasticity
25	30	100	40			
40	70	120	90			
200	220	80	64			
50	75	150	135			

Has revenue increased or decreased in each case?

1.................................

2.................................

3.................................

4.................................

In the table below put a tick in the box that associates the appropriate elasticity value with the appropriate effect on total revenue when price rises (as in the above examples):

Elasticity value	Elastic	Inelastic	Unit elastic
Effect on total revenue			
Increase			
Decrease			
Stay the same			

3. PRICING STRATEGY

As we have seen above it is important to a company to have an idea of the value of the elasticity of demand of its good or service as it will affect what happens to their total revenue as price changes. What should the company aim to do with their price in each of the circumstances below?

Elasticity	Increase or decrease price?
Elastic	
Inelastic	
Unit elastic	

4. ELASTIC or INELASTIC?

If the company want to estimate the value of the price elasticity of their product, then they need to judge it against the following criteria:

Proportion of income spent on the good - the lower the proportion of income spent, the more inelastic the good will tend to be

The number of substitutes - the more substitutes a good has the easier it is for consumers to switch to another product if the price goes up

The strength of the brand - the stronger the brand, the more inelastic the product will be

The level of necessity or addiction - the more necessary or addictive something is, the more inelastic it will be

Judge the products in the table below to decide whether you think they will be elastic or inelastic:

Product	Elastic or inelastic?	Reasons? .
A box of matches		
A luxury holiday		
Computers - home users		
Computers - business users		
Cigarettes		