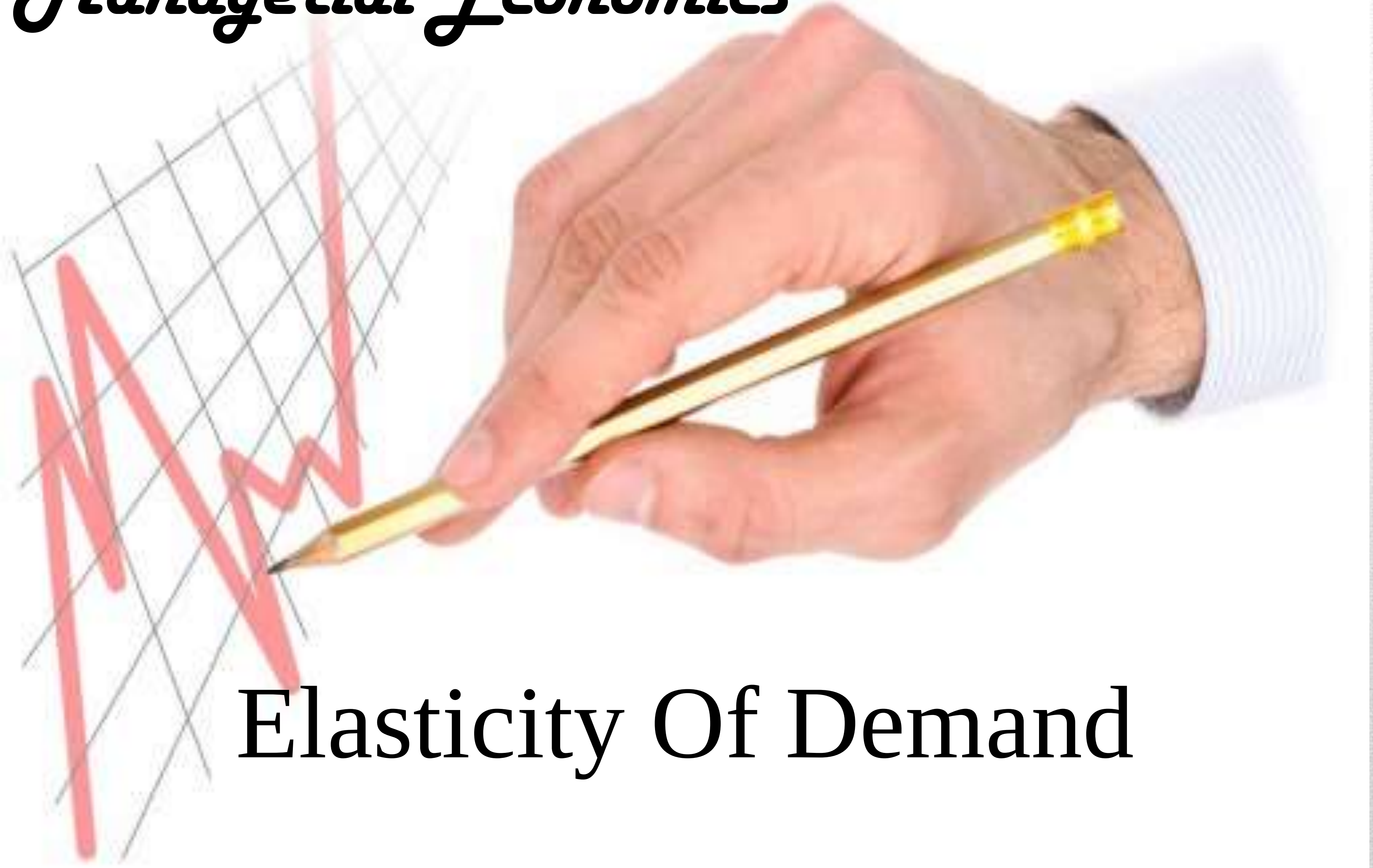
Managerial Economics



Elasticity Of Demand

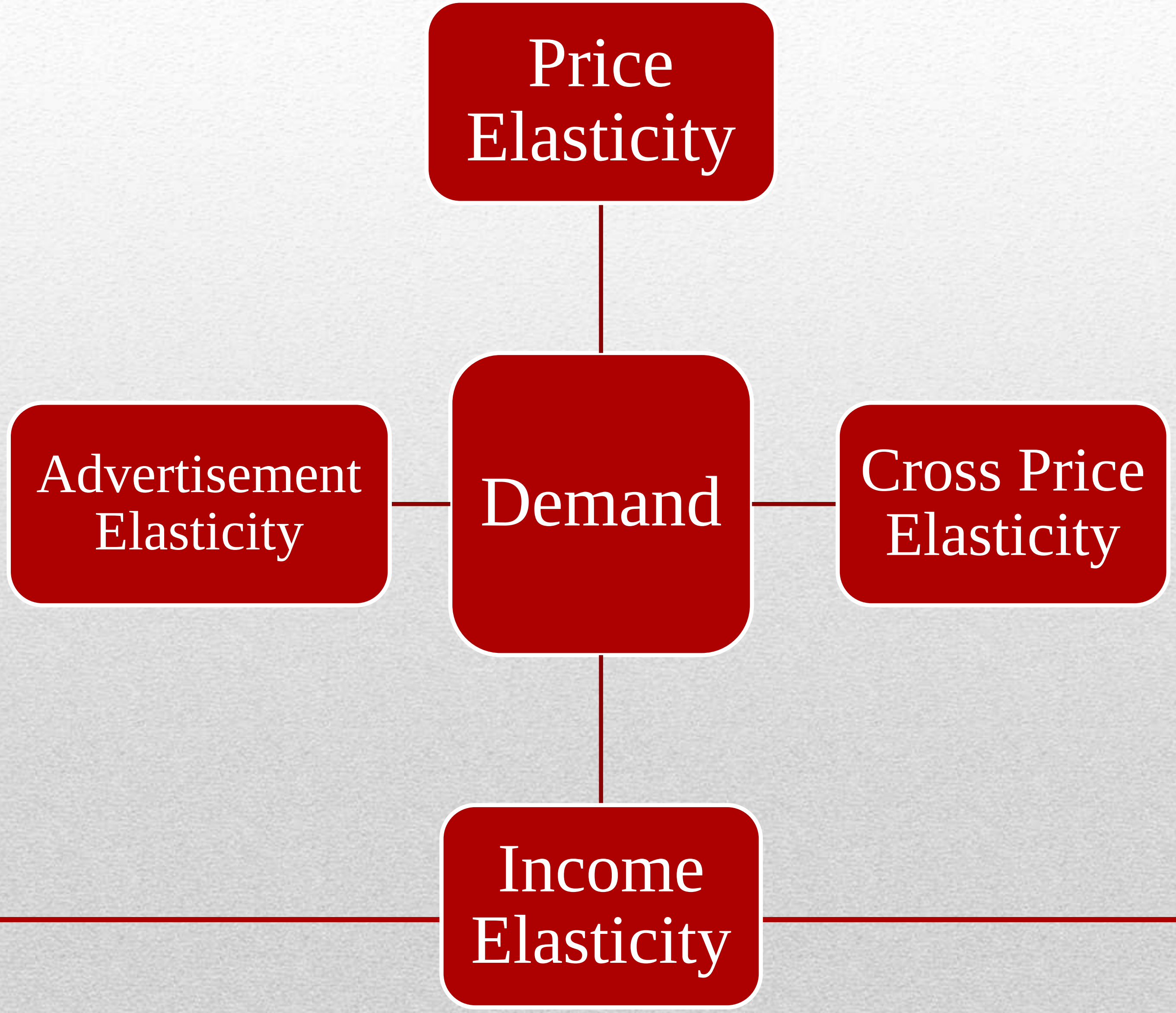
Concepts Of Elasticity Of Demand

Two Variables are considered while measuring the elasticity of demand :-

- Demand
- Determinants Of Demand

$$\text{Elasticity Of Demand} = \frac{\text{percentage change in quantity demanded}}{\text{percentage change in determinant of demand}}$$

Types Of Elasticity Of Demand



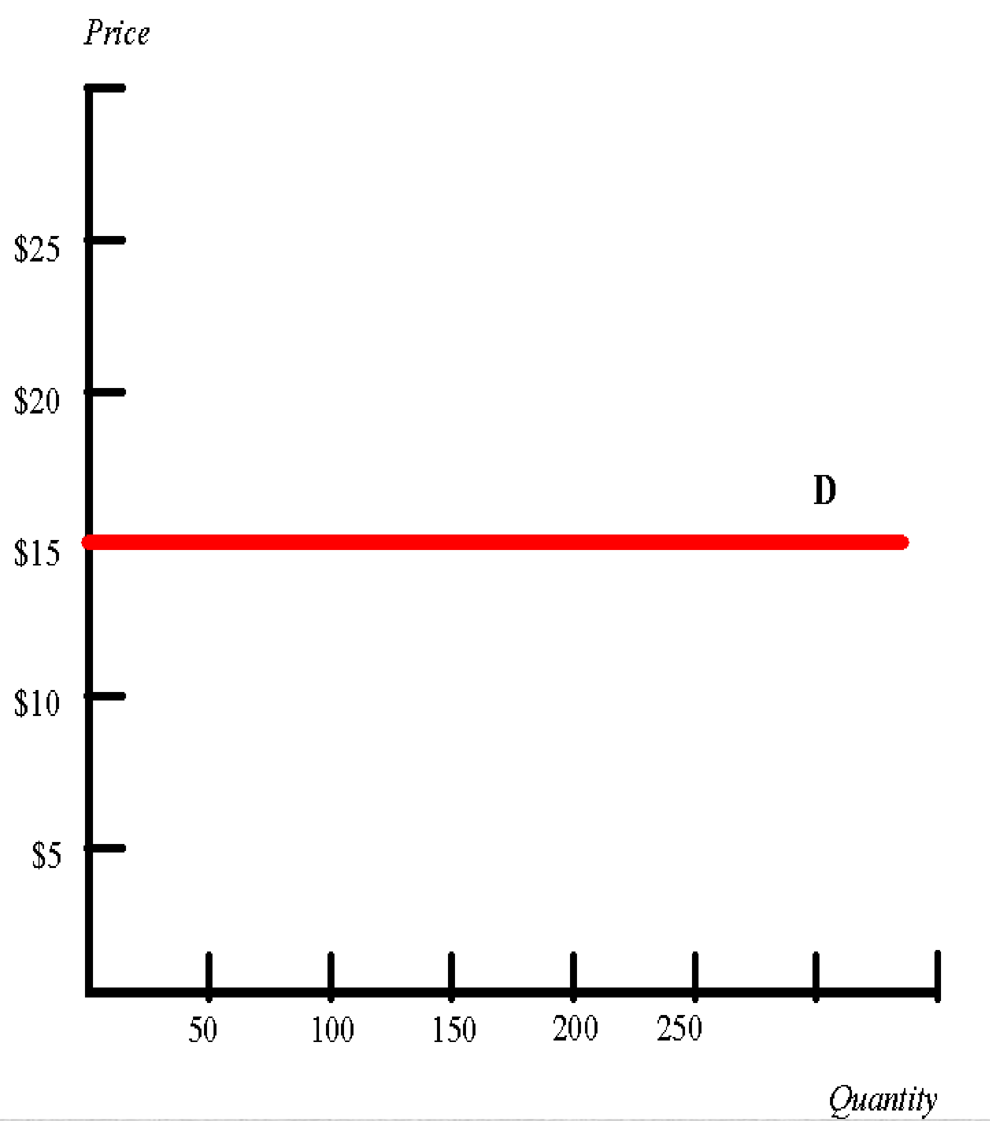
Price Elasticity Of Demand

The price elasticity of Demand may be defined as the ratio of the relative change in demand and price variables.

$$e = \frac{\text{percentage/proportional change in quantity demanded}}{\text{percentage/proportional change in price}}$$

Types Of Price Elasticity

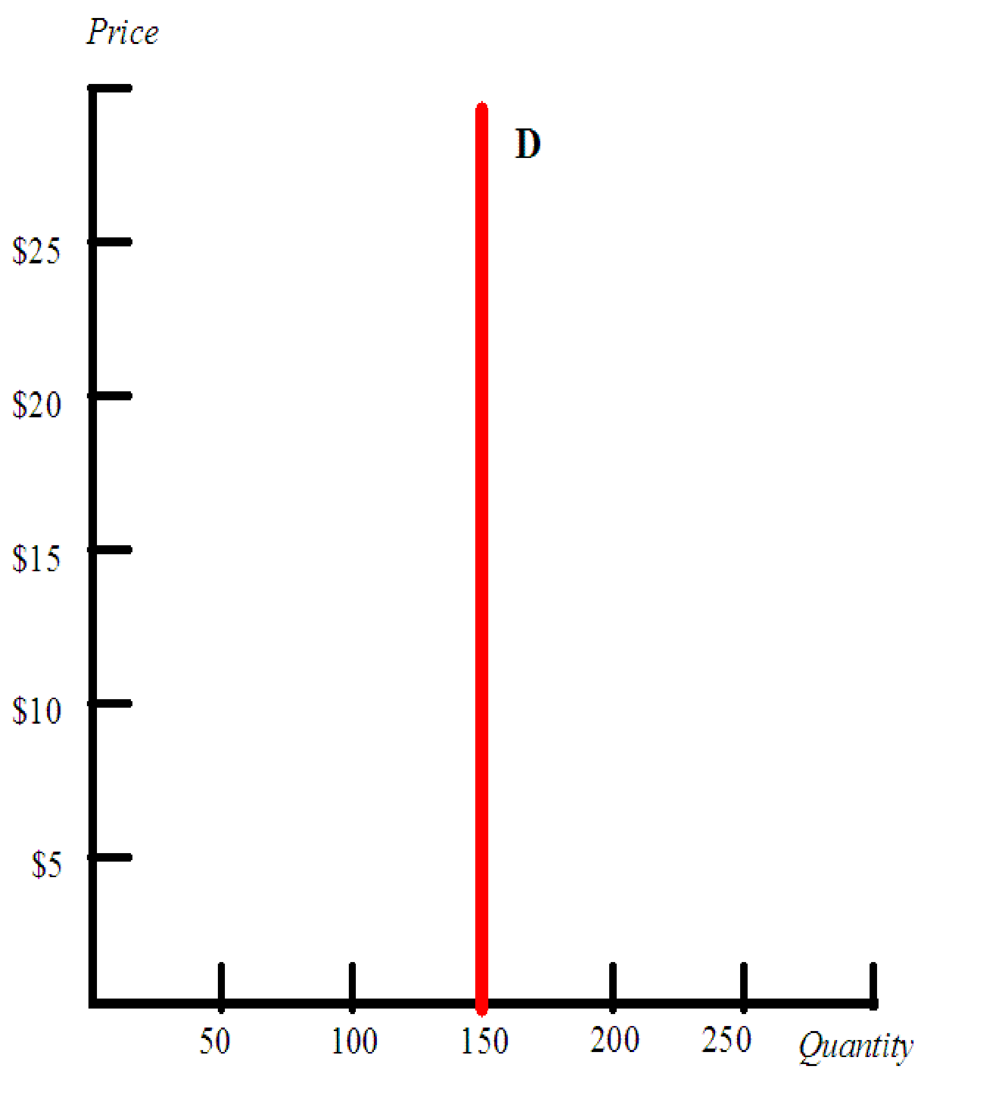
Perfectly Elastic



Consumers have indefinite demand at a particular price and none at all at an even slightly higher than this given price, demand is <u>PERFECTLY ELASTIC</u>

$$e = \infty$$

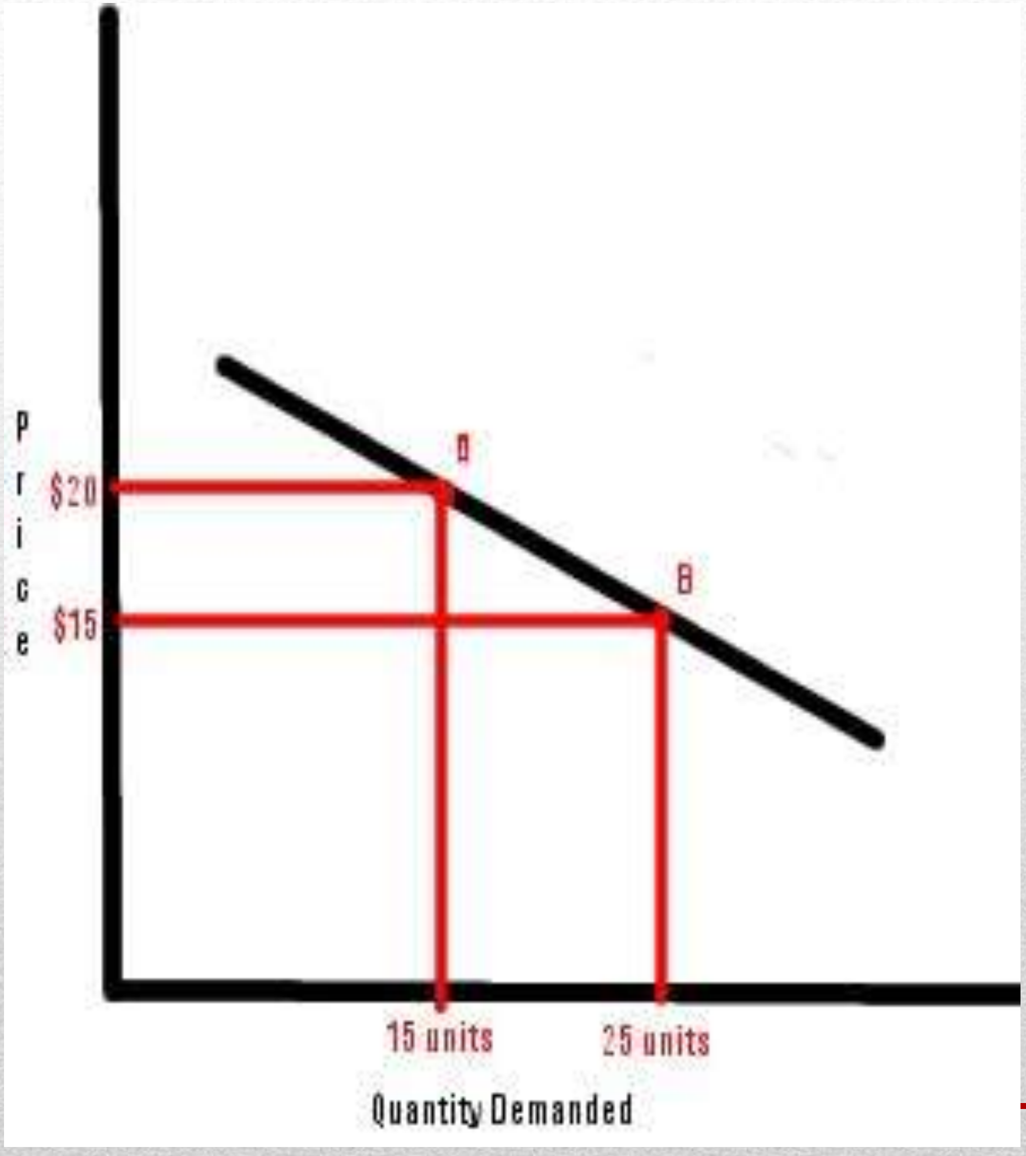
Perfectly Inelastic



When the demand for a commodity shows no response to a change in price/ whatever change in price, the demand remains same, it is called <u>PERFECTLY ELASTIC</u>

$$e = 0$$

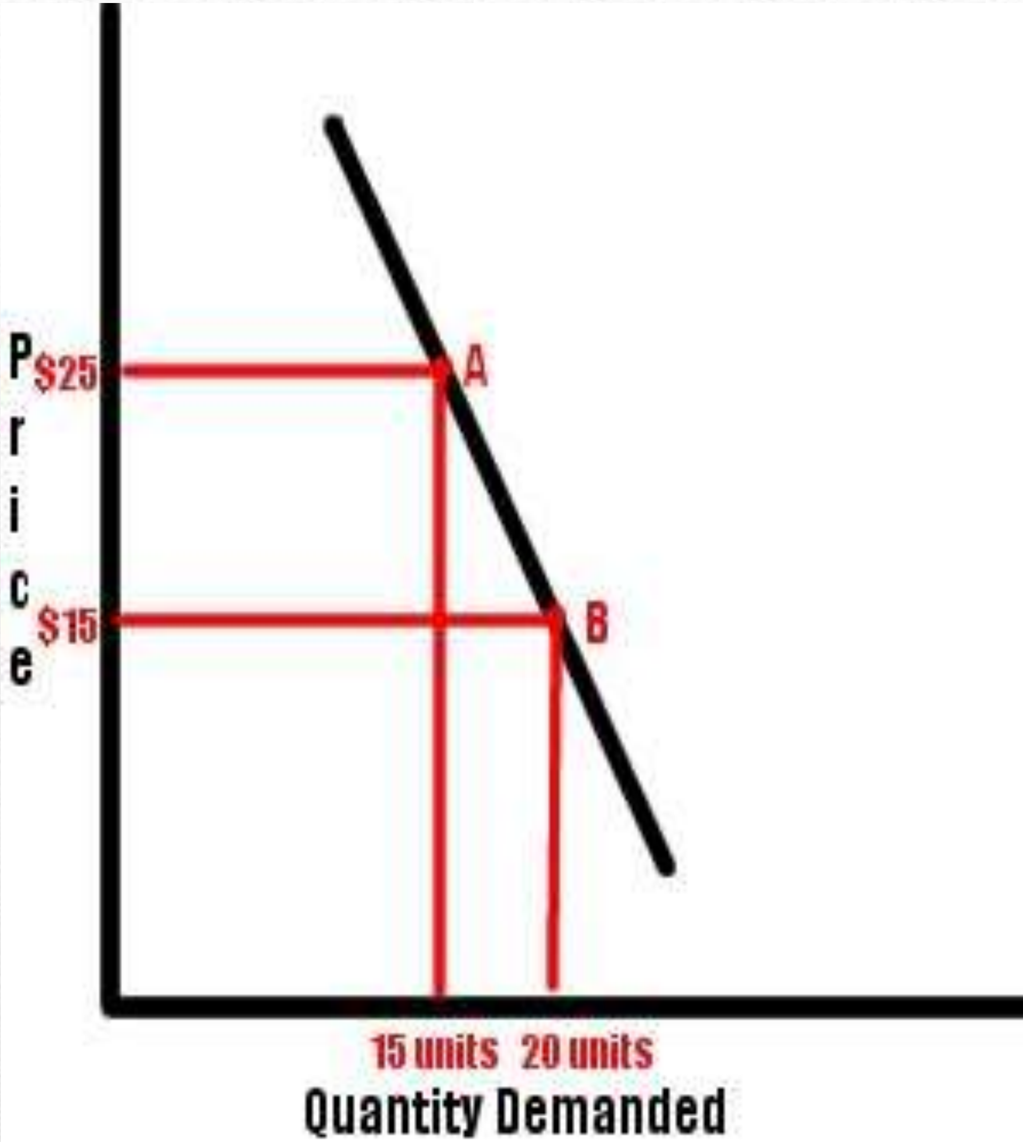
Relatively Elastic



When the proportion of change in the quantity demanded is greater than that of price, the demand is said to be <u>RELATIVELY ELASTIC</u>

$$e > 1$$

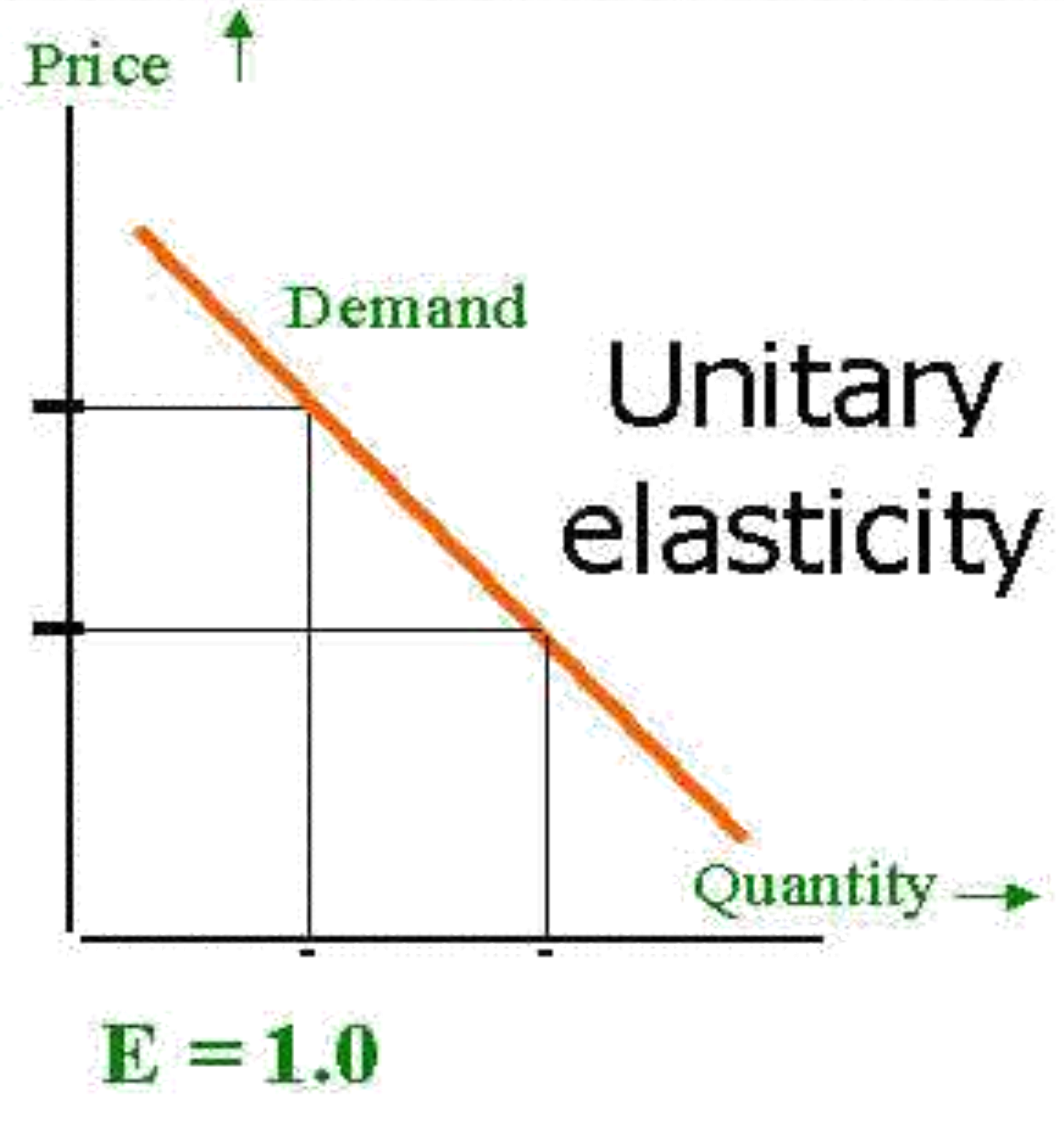
Relatively Inelastic



When the proportion of change in the quantity demanded is less than that of price the demand is considered to be RELATIVELY INELASTIC

$$e < 1$$

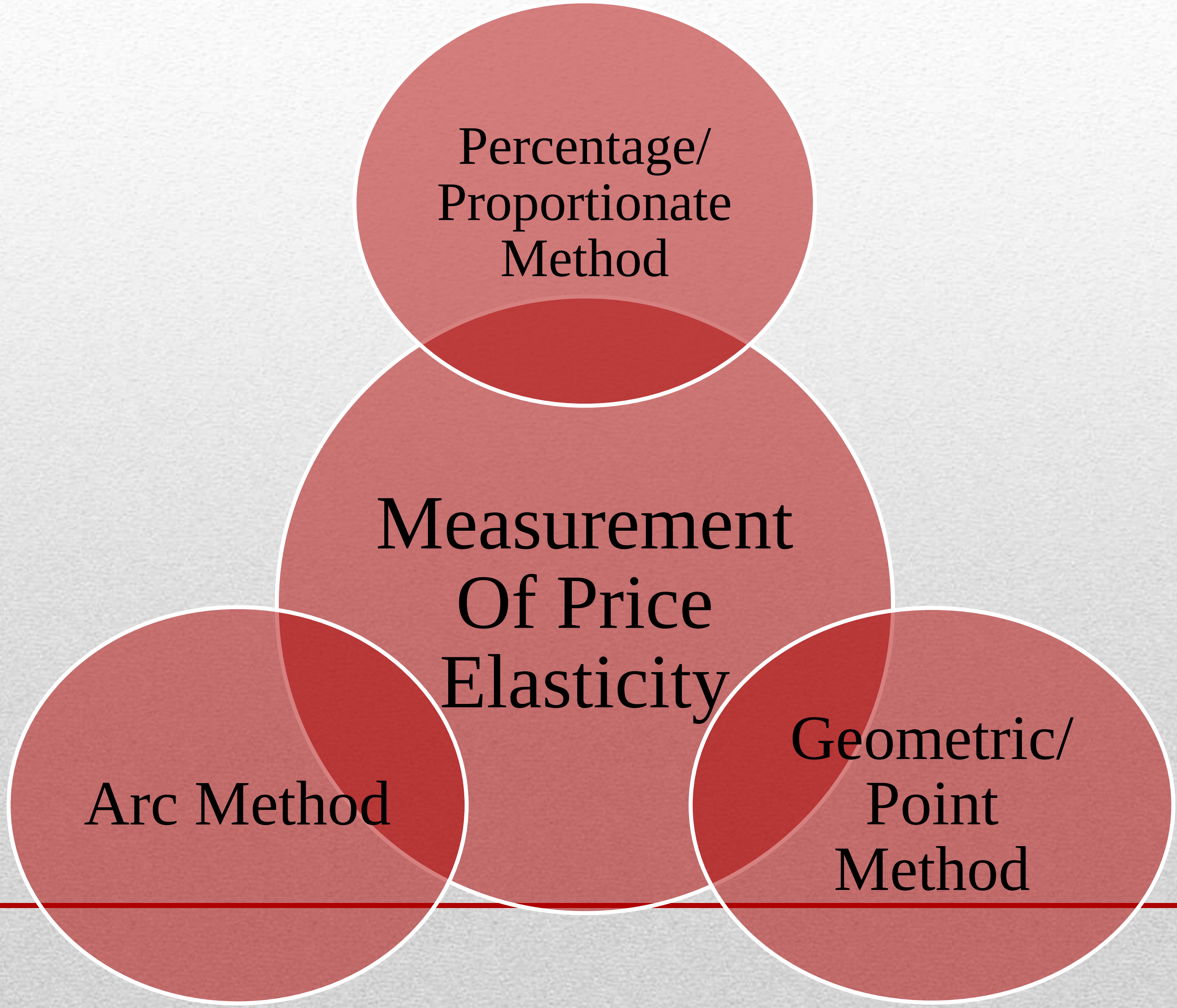
Unitary Elastic



When the proportion of change in demand is exactly the same as the change in price, the demand is said to be <u>UNITARY ELASTIC</u>

$$e = 1$$

Measurement Of Price Elasticity



Point/Geometric Method

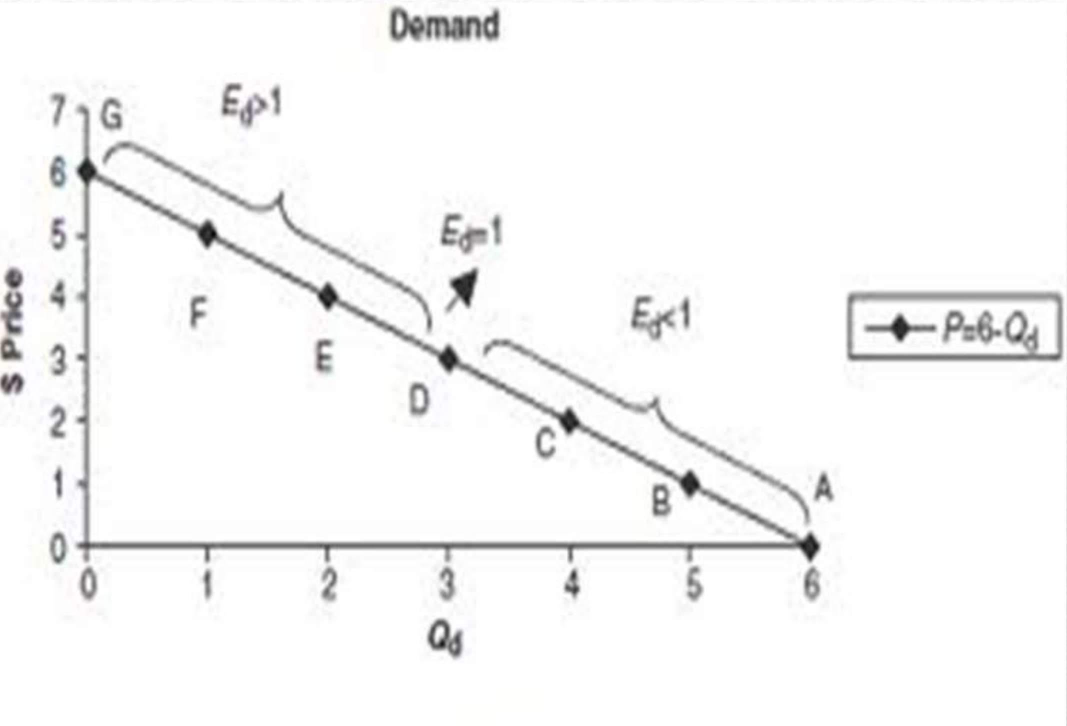


Figure 7.1

This method attempts to measure the price elasticity of demand at a particular point on demand curve

$$\text{Point Elasticity} = \frac{\text{Lower segment of demand curve below the point}}{\text{Upper segment of demand curve below the point}}$$

Arc Elasticity Of Demand

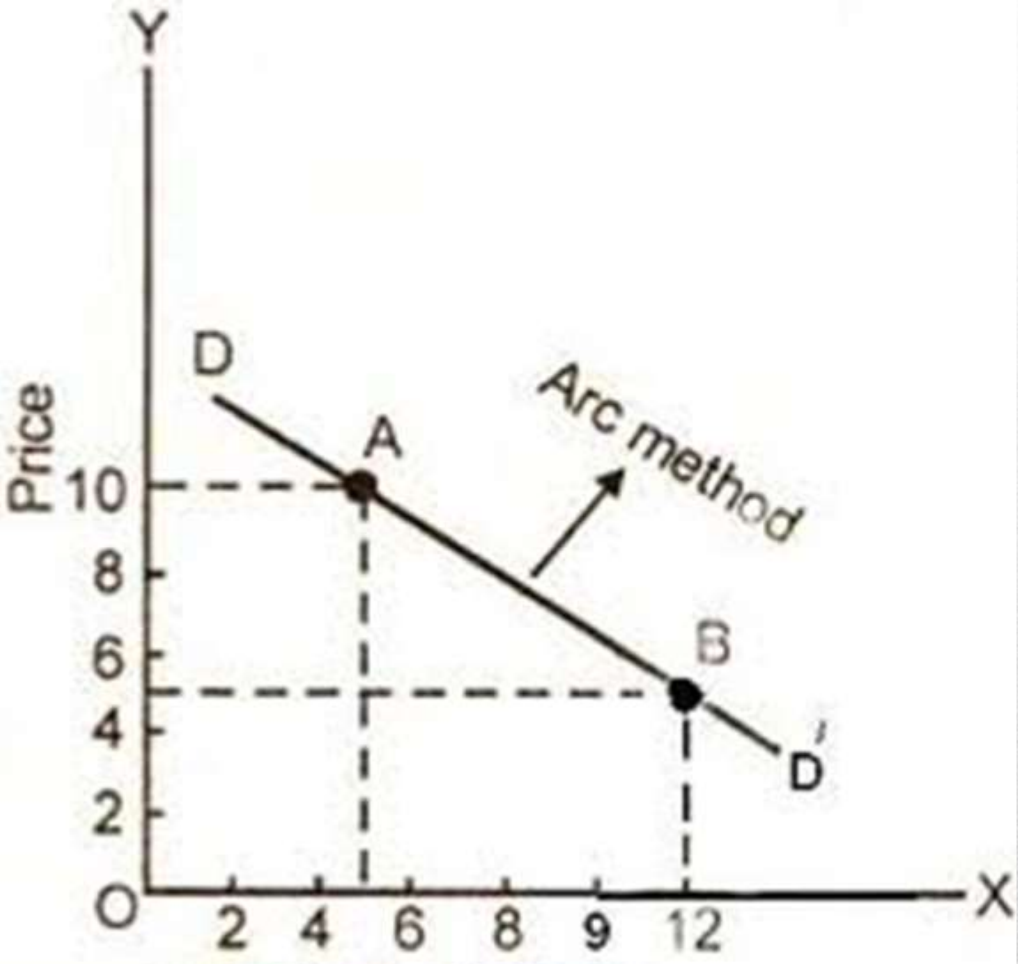


Fig. 6.11

Arc Elasticity of Demand measures the elasticity at the mid point between two points on a curve

Income Elasticity Of Demand

The income elasticity is defined as a ratio percentage or proportional change in the quantity demanded to the percentage or proportional change in income.

$$\text{Income Elasticity} = \frac{\text{percentage change in quantity demanded}}{\text{percentage change in income}}$$

Cross Elasticity Of Demand

The cross elasticity of demand refers to the degree of responsiveness of demand for a commodity to a given change in the price of some related commodity.

$$\text{Cross Elasticity Of Demand} = \frac{\text{Proportionate/percentage change in demand for x}}{\text{Proportionate/percentage change in price of y}}$$

Factors Influencing Elasticity Of Demand

- Nature of commodity
- Availability of substitutes
- Number of uses
- Consumers income
- Height of price and range of price change
- Proportion of expenditure
- Durability of the commodity
- Habit
- Complementary goods
- Time
- Recurrence of demand
- Possibility of postponement

Application Of Income Elasticity

- Long term business planning
- Market strategy
- Housing development strategies

Practical Applications

- To businessmen
- To the government and finance minister
- To international traders
- To policy makers
- To trade unionists

Thank you