Province of the
EASTERN CAPE
EDUCATION

PROVINCE OF THE EASTERN CAPE

ECONOMICS

GRADE 12

2020

TOPIC: MONOPOLY

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The dynamics of imperfect market

- Imperfect markets are characterised by imperfect competition
- One of the conditions of perfect competition is not satisfied
- Imperfect markets include:
  - Monopoly
  - Oligopoly
  - Monopolistic competition

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Monopoly

- A market structure with only one producer and seller of a product or services
- There is usually no close substitute
- Many barriers to entry
- This lack of competitors results in 3 harmful things:
  - Less output is produced than in a competitive environment
  - The output is sold for more than the market price would be if the industry was competitive
  - Production is less efficient and costs more than in a competitive environment

Characteristics of monopoly

- There is no competition (one supplier/business)
- The products are unique with no close substitutes
- They are still faced by demand curves
  - But because they are the only supplier, they can decide where on the demand curve they want to be
- They have considerable control over the price
  - They can decide on production levels, increasing or decreasing prices accordingly
- They are exposed to market forces (consumers have limited budgets
  - Monopolies must still compete with all other products available in the economy

Characteristics of monopoly

- They can face substitutes
  - They are very few products that have absolutely no substitutes
  - E.g. although there is one supplier of electricity, you can still use gas to cook or generator to produce electricity
- They are likely to exploit the consumer, because they are the only supplier of a product
  - Most governments guard against this
- They are protected by barriers to entry;
  - Legal restriction
    - Through government acts, which grant exclusive rights e.g. post office

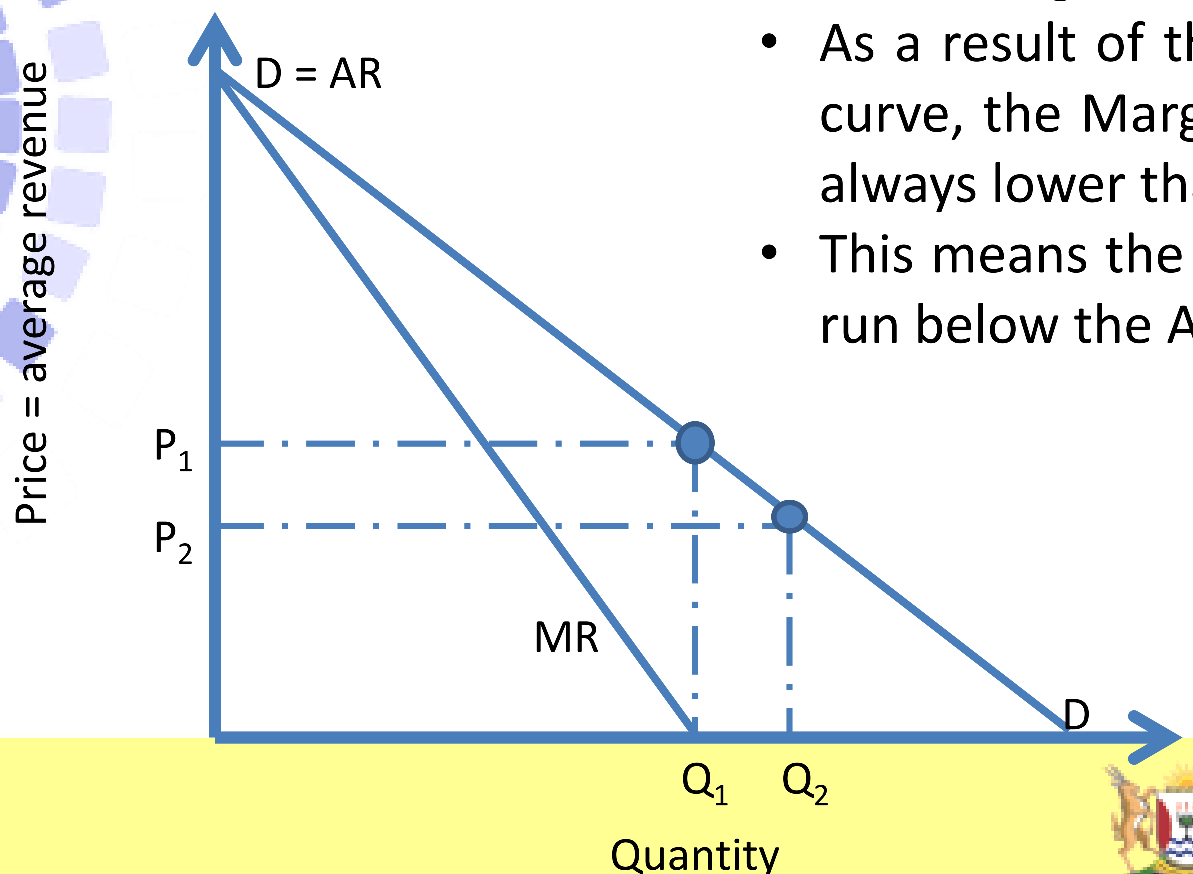
Characteristics of monopoly

- Patents
  - Are legal rights whereby the patent holder obtains exclusive rights to manufacture a product
- High start-up or development cost
  - E.g. it costs a lot to build a power station or buy a fleet of airplanes (natural monopoly)
- Licensing
  - One can only operate if granted a license by government, e.g. telephone service providers & TV broadcasting
- Technical superiority
  - When a business' technical expertise vastly exceeds its competitors, it can dominate the market, e.g. microsoft

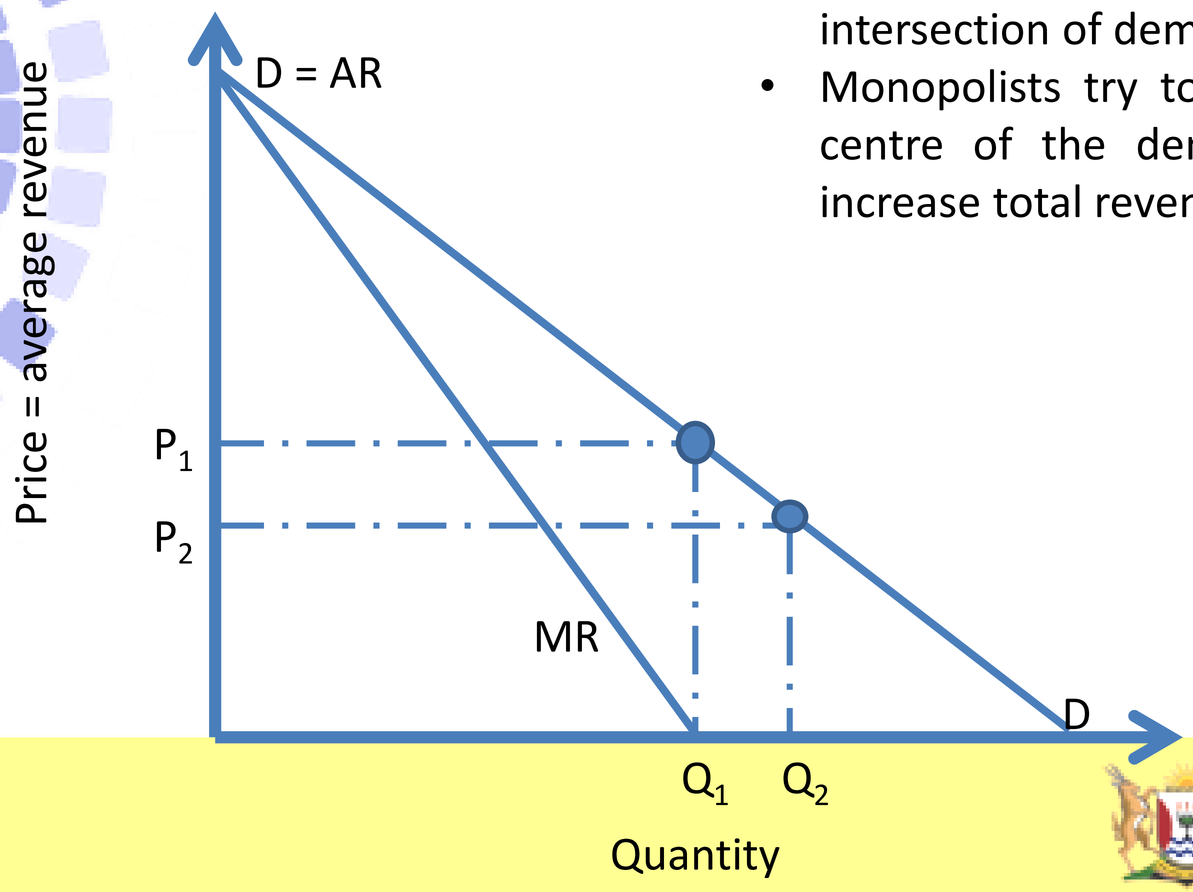
Cost and Revenue Curves

- NB: unlike the perfect competitor, the production of the monopolist makes up the total production for the market
- **The monopolist therefore faces a normal market demand curve (one which slopes downwards from left to right)**

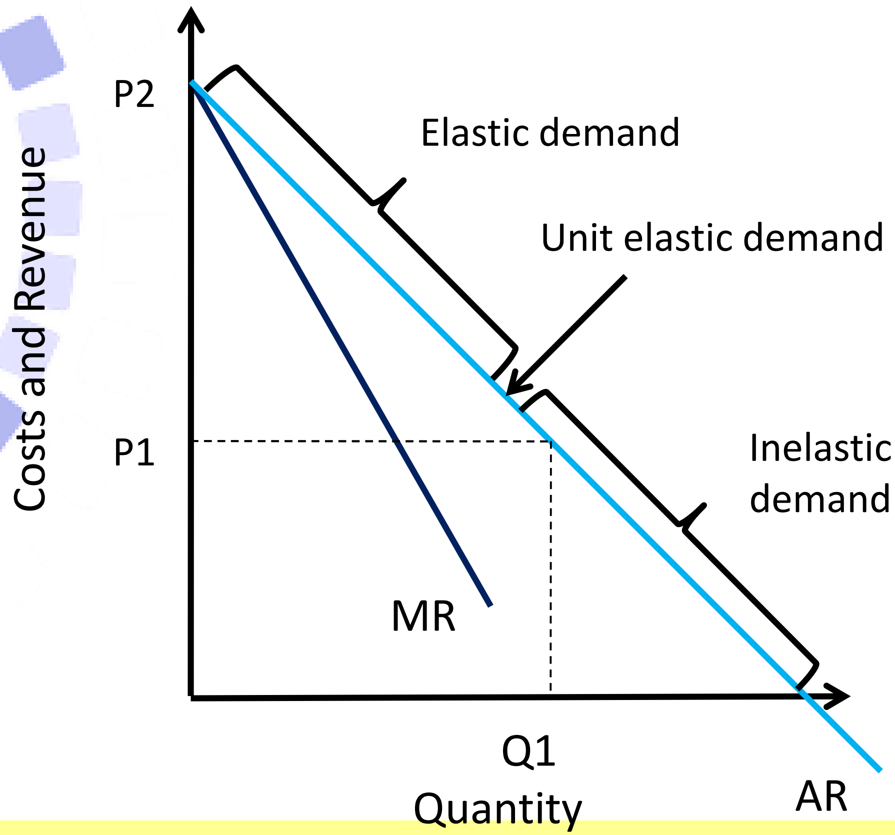
- The monopolist can sell at any price-quantity combination on the demand curve
- The monopolist demand curve is also the Average Revenue (AR) curve
- As a result of the downward sloping curve, the Marginal Revenue (MR) is always lower than the AR
- This means the MR curve will always run below the AR curve



- A price-quantity combination in the demand curve is also its average revenue (AR) curve.
- The AR from each product is calculated by dividing the total revenue by quantity = price
- The MR always cuts the horizontal axis halfway between origin and the point of intersection of demand curve/AR.
- Monopolists try to fix the price above the centre of the demand curve in order to increase total revenue.



Revenue in a monopoly



The monopolist is a price-maker. The level of output is determined by the demand for the goods and /or service that the monopolist provides. In the case of a monopoly the demand curve is the firm's average revenue curve.

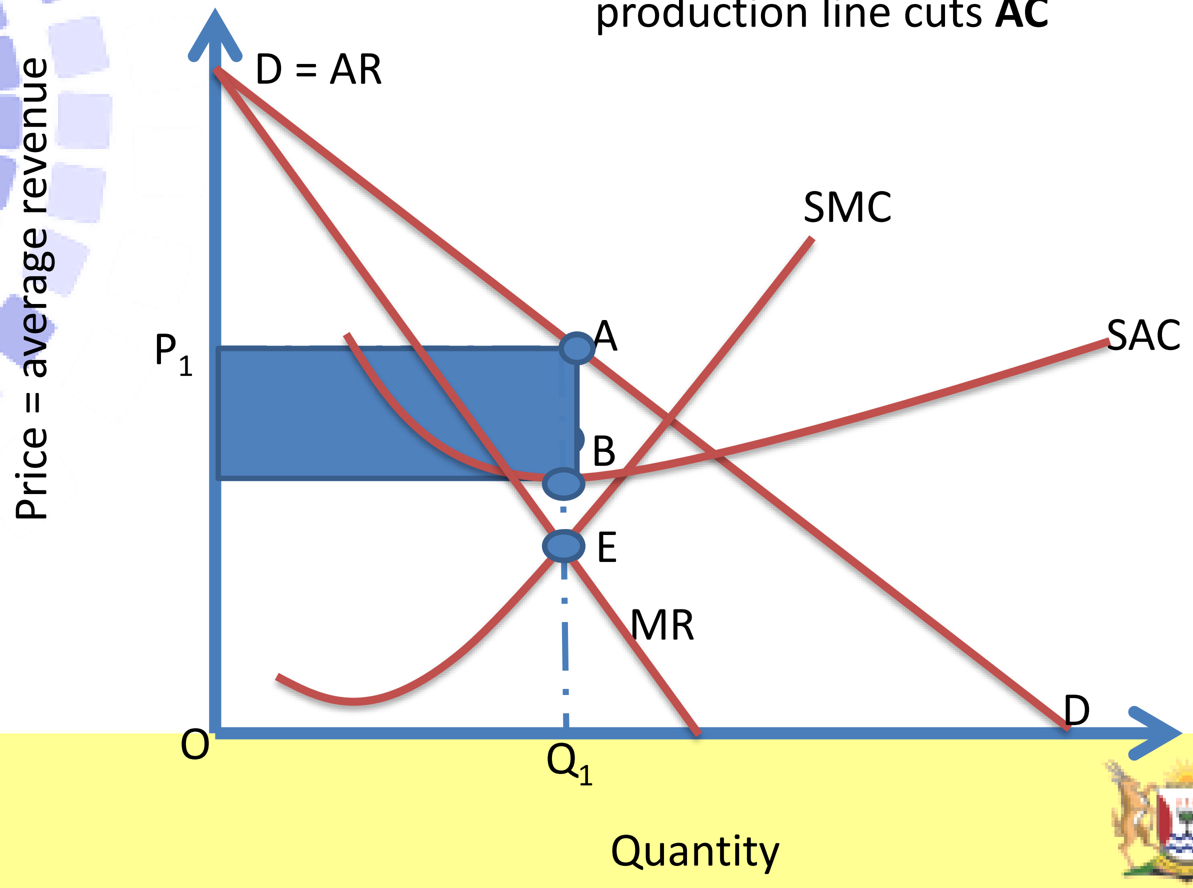
Total revenue is calculated using the following formulae:

Price x Quantity

In this case P1 x Q1. Please note that the elasticity for the demand curve for the monopolist changes depending upon the price at which and goods are sold - please see the adjacent diagram.

Economic Profit

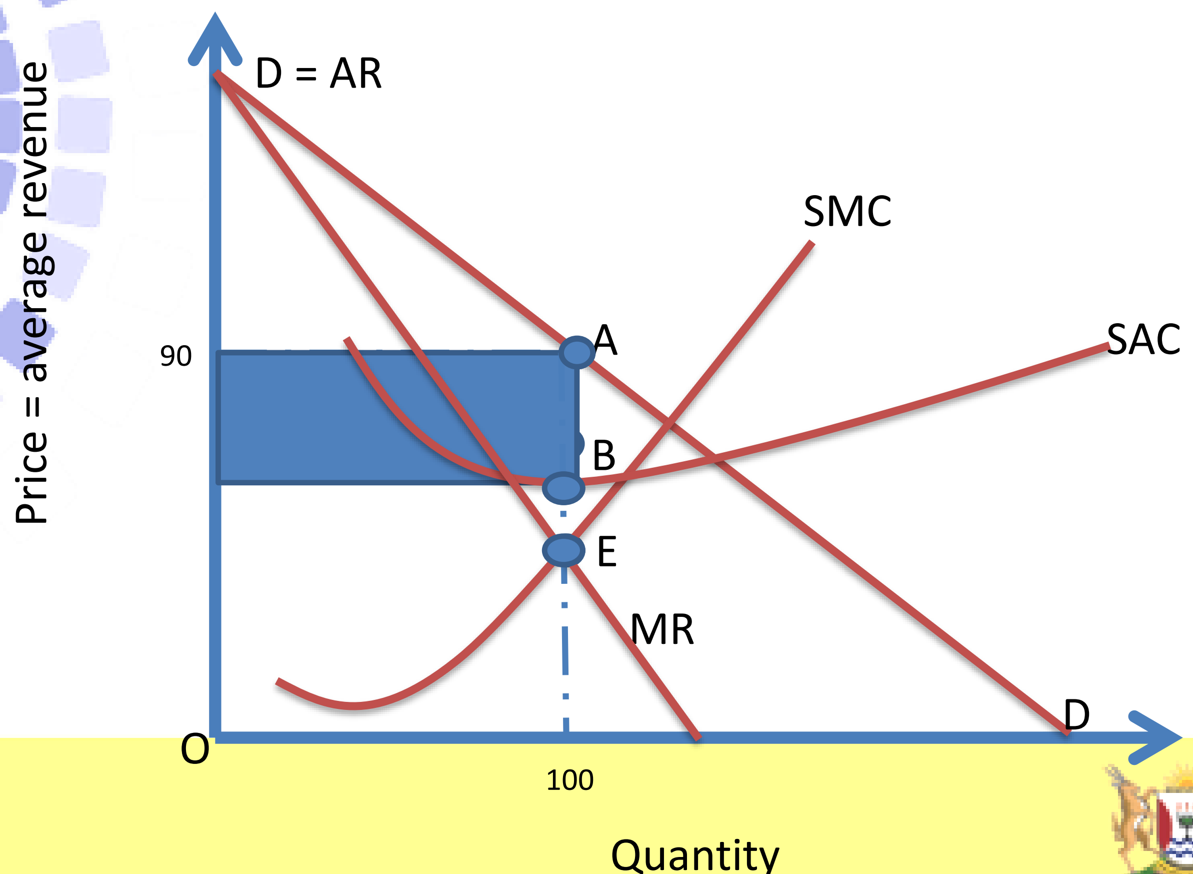
- Profit is maximised by expanding production line up to a point where **SMC = MR (point A)**
- At this point, quantity that should be produced to maximise profit is $\mathbf{Q_1}$
- The price at which the product will be sold should correspond with **point A (where price is $\mathbf{P_1}$)**
- The cost will be determined at point B where production line cuts **AC**



Economic profit

- The monopolist's **Total Revenue**:
  (TR) = Q_1 x P_1
- **Total Cost:**
  (TC) = Q_1 x AC (point B)
- From the graph:
  TR > TC
- **this means the monopolist has made an ECONOMIC PROFIT**

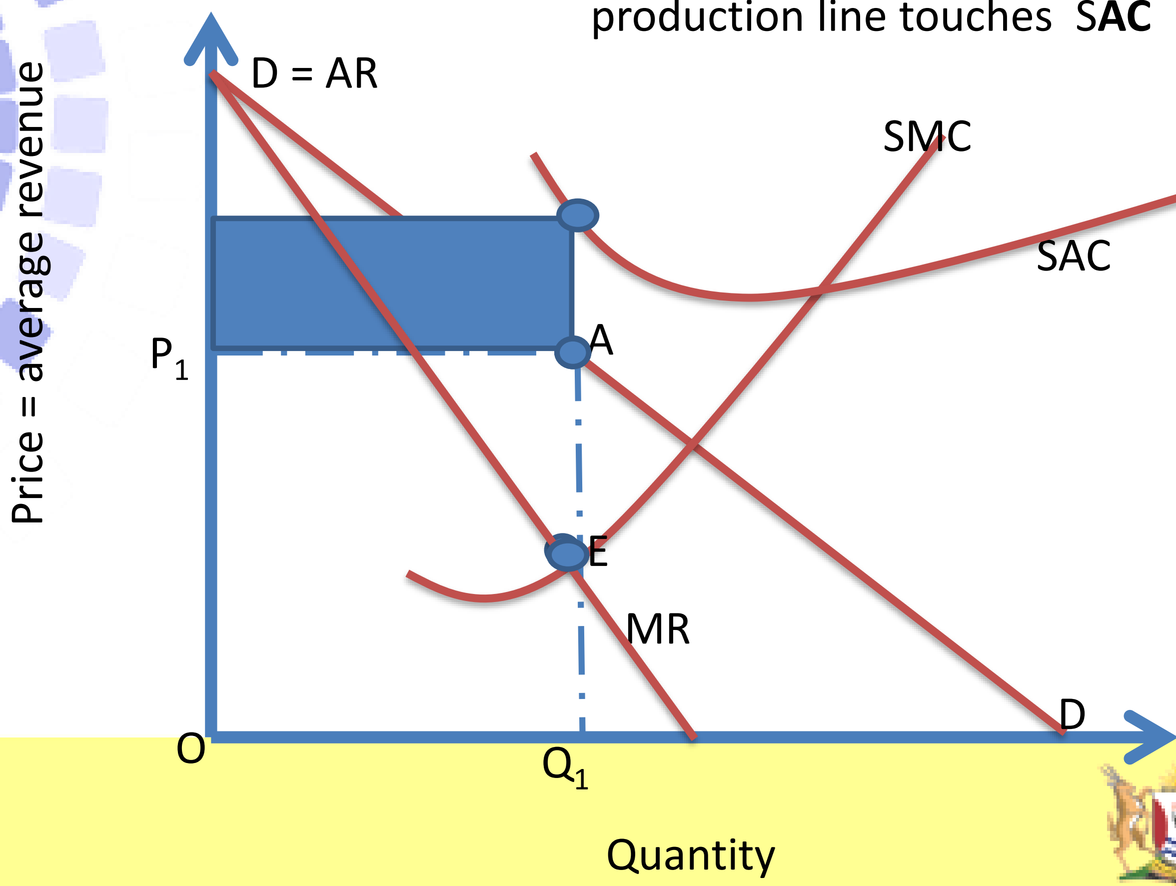
Economic Profit



Economic Loss

Loss is minimised by expanding production line up to a point where **SMC = MR to point A**

- At this point, quantity that should be produced to minimise losses is $\mathbf{Q_1}$
- The price at which the product will be sold should correspond with **point A (where price is $\mathbf{P_1}$)**
- The cost will be determined at point B where production line touches S**AC**



Economic loss

- The monopolist's <u>**Total Revenue**</u>:
  (TR) = $Q_1 \times P_1$
- <u>**Total Cost:**</u>
  (TC) = Q_1 x C (QBCO)
- From the graph:
  TC > TR
- **this means the monopolist has made an ECONOMIC LOSS**

Short term Losses

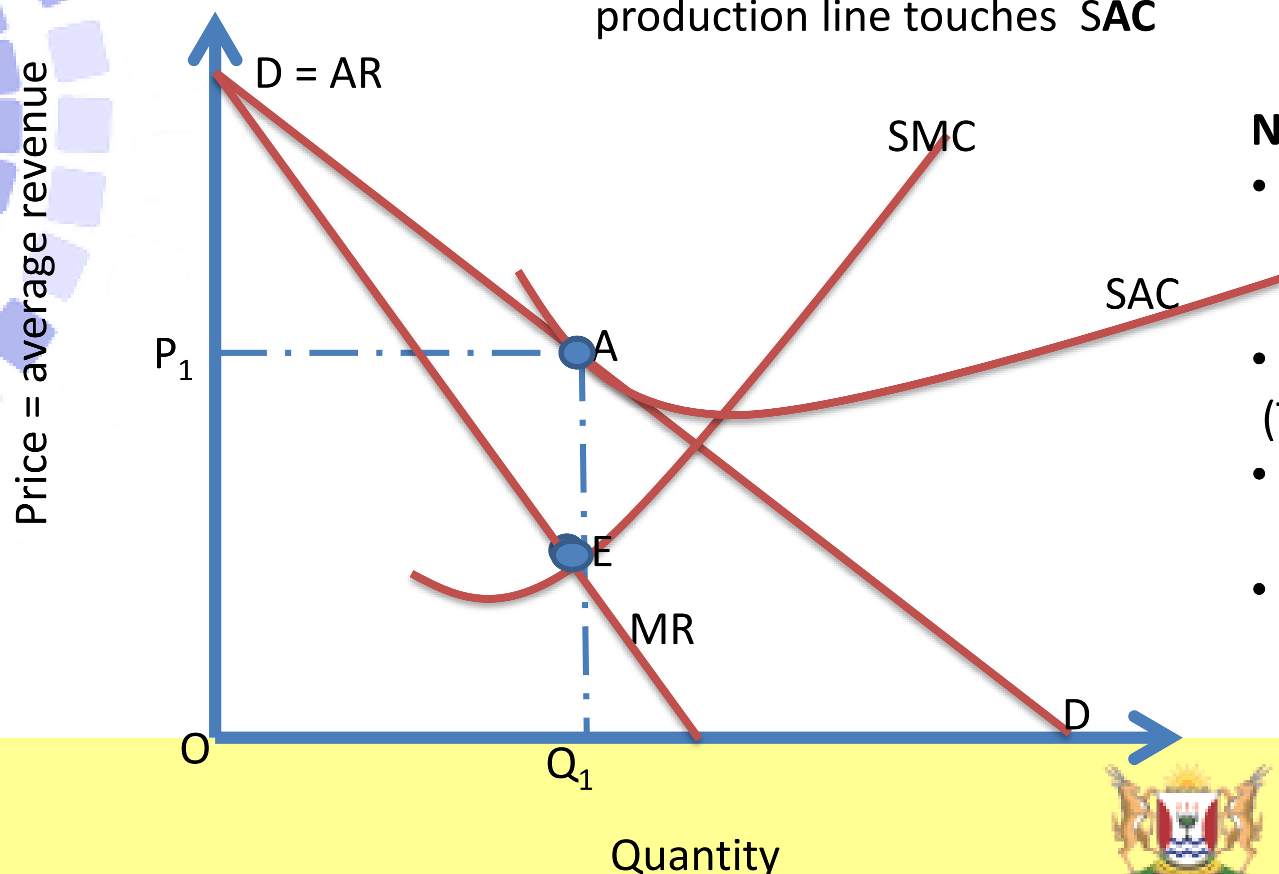
Economic loss can only be for a short time as monopolist as price setters will soon raise the price to cover losses.

In a short term Monopolists can have economic loss.

Normal Profits

Profit is maximised by expanding production line up to a point where **SMC = MR to point A (Demand Curve)**

- At this point, quantity that should be produced to maximise profit is **Q_1**
- The price at which the product will be sold should correspond with **point A (where price is P_1)**
- The cost will be determined at point B where production line touches S**AC**



Normal Profits

- The monopolist's **Total Revenue**: (TR) = Q_1 x P_1
- **Total Cost:** (TC)=Q_1 x C(where P=C)
- From the graph: TC = TR
- **this means the monopolist has made a Normal Profit**

Monopoly vs Perfect market

- Monopoly

Downward sloping Demand curve

MR lies below demand curve

Price setter

Individual business is the industry(only firm)

Products differentiated

Can make economic profits even in the long-run

- Perfect market

Horizontal Demand curve

MR curve same as demand curve

Price-taker

Individual businesses (many) add up to make the industry.

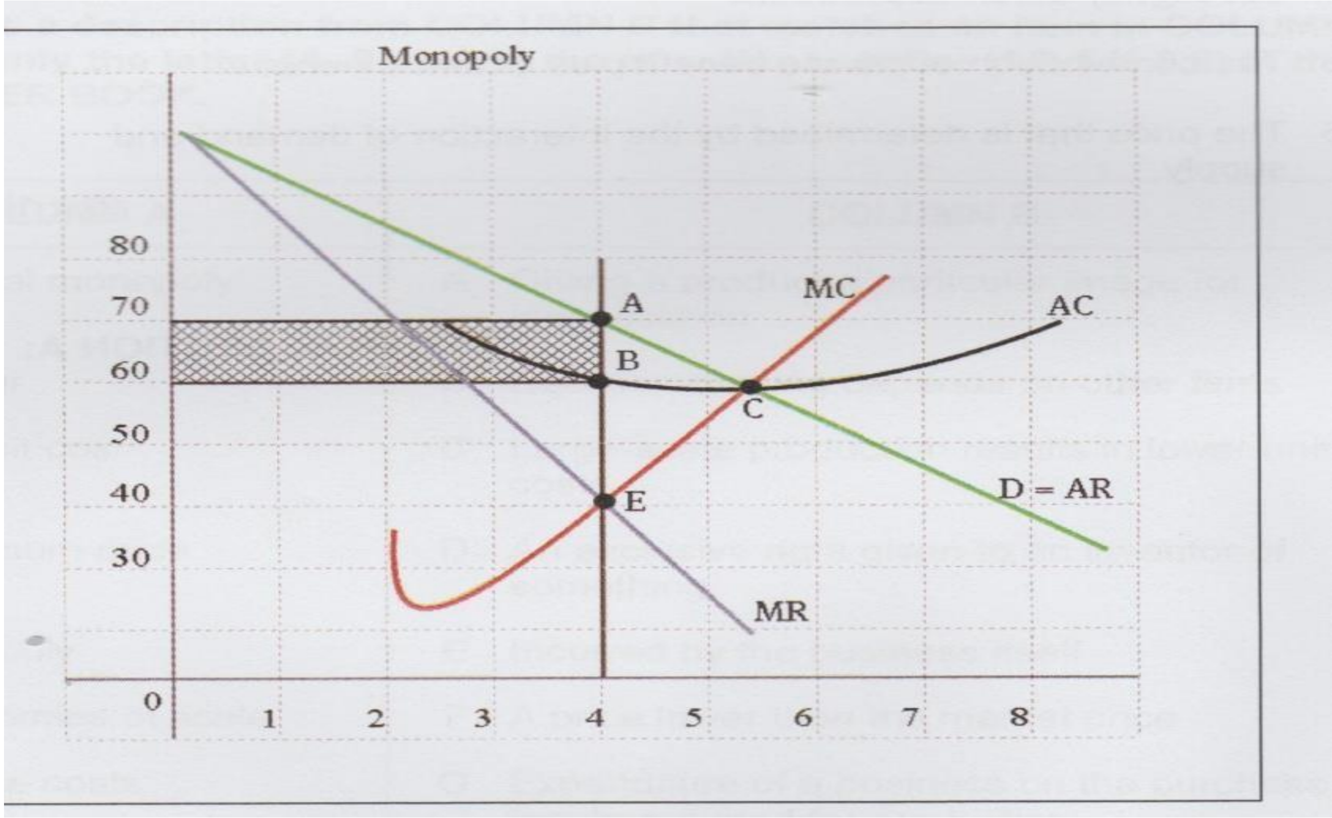
Product are homogenous

Only normal profit in the long-run.

Summary

1. A monopolist is the sole producer in the industry.
2. The demand curve for the monopolist is a market demand curve.
3. The average revenue curve is the demand curve.
4. Marginal revenue falls twice as steeply as the average revenue curve.
5. Profit is maximised where MC=MR on the demand curve.
6. The monopolist is likely to earn abnormal profit because average revenue will be above the average cost at equilibrium level of output.
7. The monopolist can practice price discrimination.

Study the graph below and answer the following homework questions



Homework

1.1 Identify the price charged by the above firm. (1)

1.2 Describe the nature of the product supplied. (1)

1.3 What determines the optimum production level in a monopoly market? (2)

1.4 Describe economic profit. (2)

1.5 Calculate the economic profit in the above scenario. Show calculations. (4)

2. Distinguish between artificial monopoly and natural monopoly. (8)

3. Explain why monopolist can make economic profit even in the long-run? (8)

HOMEWORK (Day 2)

- **Essay – 40 marks**

Discuss the characteristics of monopoly as a market structure. (26)

Compare and contrast the long run position of a perfect market and that of an monopoly. (10)


Thank you!