Edexcel Economics AS-level

Unit 3: Business Behaviour

Topic 2: Revenue, Costs and Profit

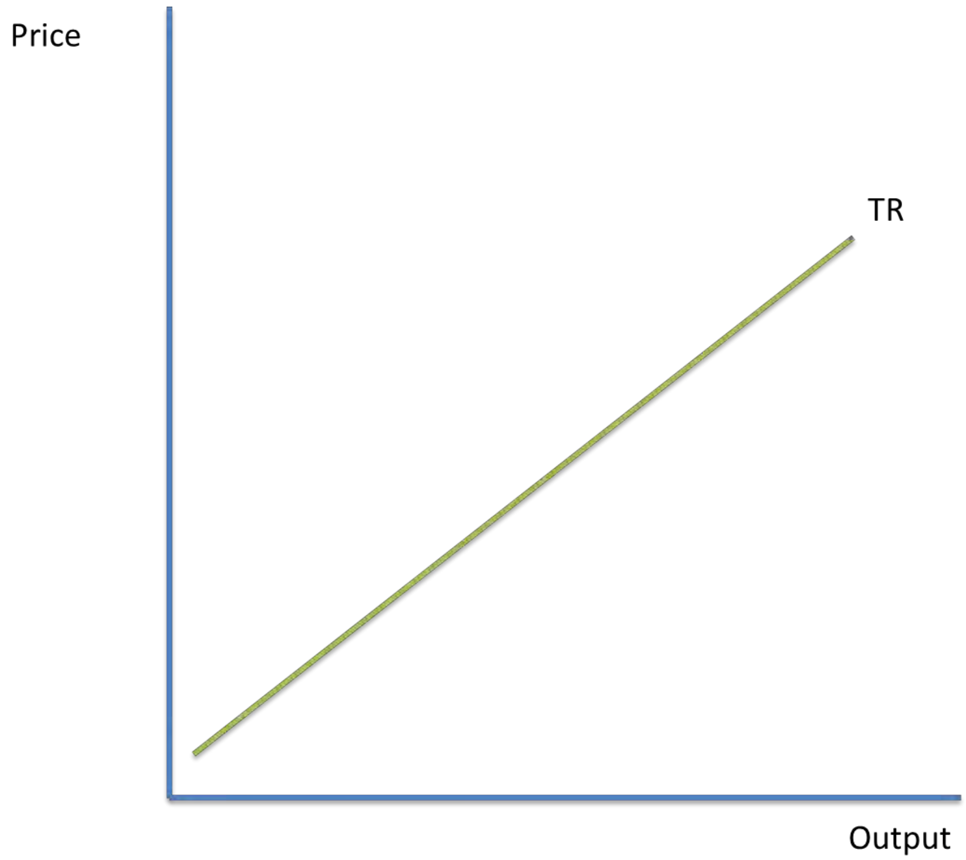
2.1 Revenue

Notes

Formulae to calculate types of revenue

Total revenue:

- Total revenue is calculated by **price x quantity sold.** It is the revenue received from the sale of a given level of output.



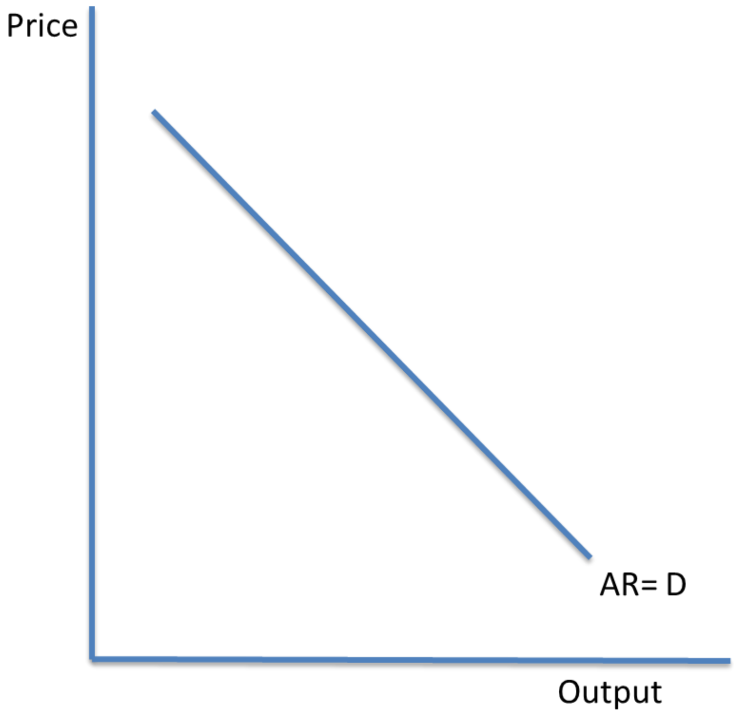
- When price is constant, TR is as shown in the diagram. Prices are lowered to achieve higher sales.

Average revenue:

- Average revenue (AR) is the average receipt per unit. This is calculated by **TR / quantity sold**. In other words, this is the price each unit is sold for.

- The AR curve is the firm's demand curve. This is because the average revenue curve is the price of the good.

- In markets where firms are **price takers,** the AR curve is horizontal. This shows the perfectly elastic demand for their goods.

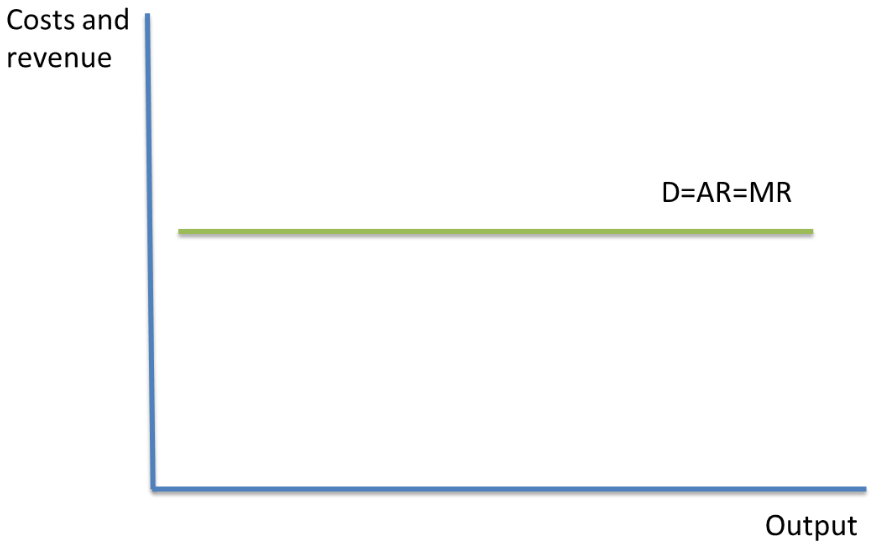


- **Marginal revenue:**

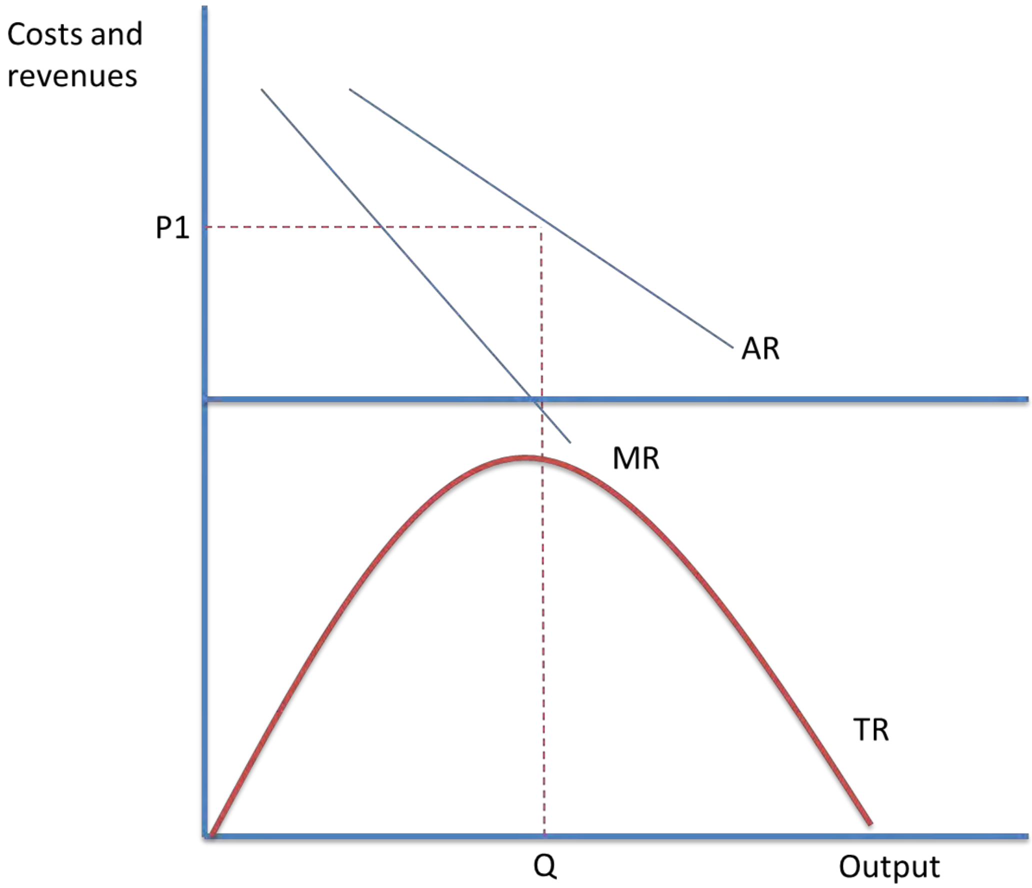
- This is the extra revenue a firm earns from the sale of one extra unit. When marginal revenue is 0, total revenue is maximised.
- The point where MR = 0 on the revenue diagram is directly below the midpoint of the AR curve. This is in the middle of the demand curve and it is the point where PED = 1.
- If prices rise or fall around this point, TR would fall.

PED and its relationship to revenue concepts:

- In markets where firms are **price takers,** the AR curve is horizontal. This is because the price received for the good is constant. This shows the perfectly elastic demand for their goods. AR= the demand curve, because AR is the price of the good, and the demand curve shows the relationship between price and quantity. Average revenue = marginal revenue.



- If demand is elastic and price increases, the quantity demanded will fall. The effect on total revenue depends on how elastic the demand is.
- For example, if price rises by 10% and demand decreases by 20%, then the elasticity of demand is +2. This means demand is very elastic and total revenue decreases.
- If prices rise by 10% and demand decreases by 1%, the price elasticity of demand is +0.1. Demand is relatively inelastic, and revenue increases.
- Usually, the AR curve is downward sloping, because the price per unit is reduced as extra units are sold.



- The MR curve is twice as steep as the AR curve. This does not have to be proven in the exam. The AR curve is a trend line.