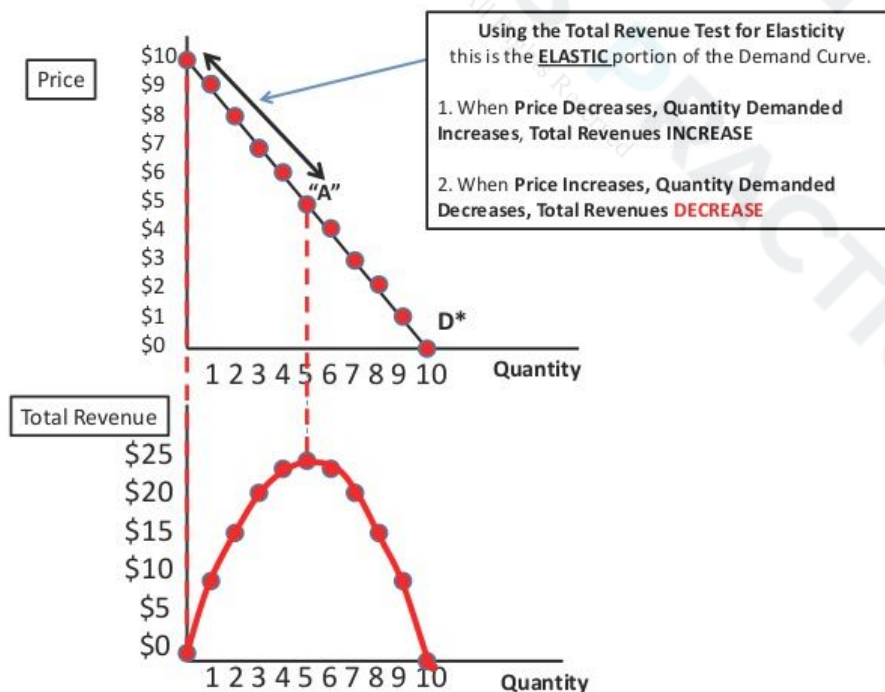


## 3.3.1 Revenue

- Formulae to calculate and understand the relationship between:
  - total revenue
  - average revenue
  - marginal revenue
- Price elasticity of demand and its relationship to revenue concepts (calculation required)
- **Price maker (imperfect competition):** a firm that has to cut its price in order to sell more
  - Total revenue is a parabola meaning as the price falls revenue will rise, but more slowly each time it is cut until the point of maximum revenue. When revenue will no longer increase  $MR=0$
- **Price taker (perfect competition):** a firm that has to offer its product at the same price as everyone else.
  - Very competitive market
  - If it charges more it won't be able to sell anything
  - Total revenue is a straight line going through the origin
  - AR curve is horizontal
- Marginal revenue is less than average revenue because when the price is cut the firm loses money on all the items it is already selling
- **Marginal revenue** measures the loss from selling fewer items versus the gain from increasing the price
- The marginal revenue is twice as steep as the average revenue curve because it has to reduce its price on all goods not just the extra output
- Once total revenue reaches a peak it starts to fall as you cut the prices (inelastic demand)



- When demand is elastic, price decreases increase revenue so increasing output increases revenue. However, when demand is inelastic, price decreases reduce revenue so expanding output reduces revenue.
- Points before the maximum are where demand is elastic ( $MR = +ve$ )
- The maximum point is where demand is unitary elastic ( $MR = 0$ )
- Points after the maximum are where demand is inelastic ( $MR = -ve$ )
- **Total revenue:** income from the sale of output
  - Price x quantity
- **Average revenue:** the price the firm receives per unit sold (same as the demand curve)
  - Total revenue/ Quantity
- For a price taker demand (AR) is perfectly elastic (horizontal) because the seller has no influence over what they can sell it at (assumes perfect competition)
- For a price maker demand is downward sloping because they have some pricing power
- **Marginal revenue:** the amount received for selling one more unit
  - Change in revenue/ change in quantity
- The point where  $MR = 0$  on the revenue diagram is directly below the midpoint of the AR curve where  $PED = 1$

