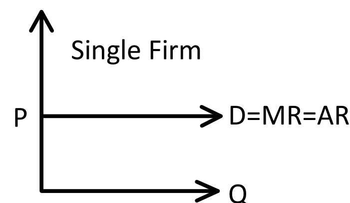
E101 - 6.1 - Competition

Perfect Competition - a market in which all buyers and sellers are price takers.

Four conditions for a perfectly competitive market are :
- Many small buyers and sellers all of whom are price takers
- No preference is shown by consumers
- Easy entry and exit by both buyers and sellers
- The same market information available to all.



Average Revenue - The amount of revenue received per unit sold.
Marginal Revenue - The extra revenue derived from the sale of one more unit.

$$Total\ Revenue = Output\ (Q) \times Price\ (P)$$

$$Average\ Revenue = \frac{Total\ Revenue\ (TR)}{Output\ (Q)} = \frac{Q \times P}{Q} = P$$

$$Marginal\ Revenue = \frac{\Delta\, Total\ Revenue\ (TR)}{\Delta\, Output} = \frac{\Delta\, Q \times P}{\Delta\, Q} = P$$

$$Price = Average\ Revenue = Marginal\ Revenue$$

Break Even Output - The level of output at which the sales revenue of the firm just covers fixed and variable costs, including normal profit.
Marginal Revenue - Revenue from producing one more unit.
Marginal Cost - Cost of producing one more unit.

$T_\pi = TR - TC$ $\quad \pi = Profit$

$MR > MC \quad produce\ more$
$MR < MC \quad produce\ less$

$Max\ T_\pi:\ MR = AR = price$
$Marginal\ Revenue = Marginal\ Cost$

Average profit - The profit per unit produced; That is, the total profit divided by the output.

$$A_\pi = P(= AR) - AC = \frac{T_\pi}{Q}$$

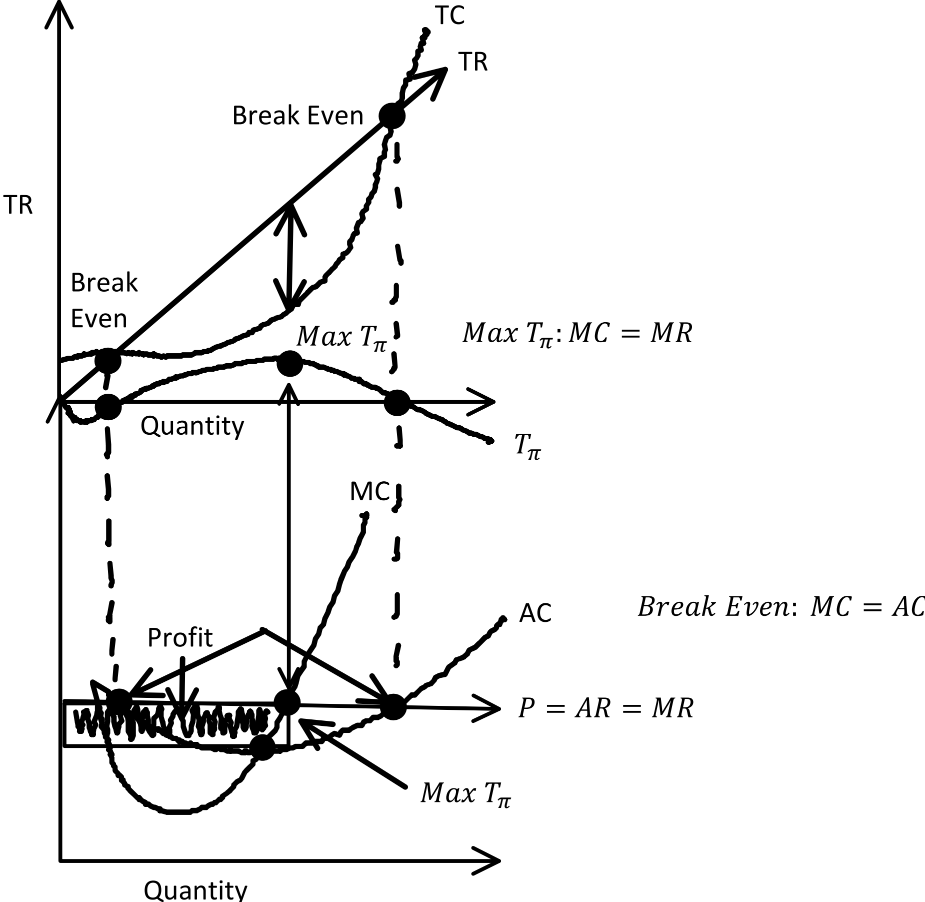
Break Even Price - The price at which the firm makes only normal profits, that is makes zero economic profits.
Shutdown Price - The price that is just sufficient to cover a firm's variable costs.

Shutdown Price - $MC = AVC$

As long as the losses from production are less than its total fixed costs, the firm should continue to produce.

The supply curve for the firm is that portion of its MC curve that lies above its average variable cost curve.

E101 - 6.2 - Competition



E101 - 6.3 - Competition

Increasing Cost Industry - An industry in which the prices of resources and products both rise as the industry expands.
Constant Cost Industry - An industry in which the prices of resources and products remain unchanged as the industry expands.
Decreasing Cost Industry - an industry in which the prices of resources and products both fall as the industry expands.

Laissez-Faire - An economic doctrine asserting that an economy works best with the minimum amount of government intervention.

Consumer Surplus - The difference between what a customer is willing to pay and the actual price of the product.
Producer Surplus - The difference between the amount that producers would be willing to accept for each unit of output and the price they receive when the output is sold.
Economic Surplus - The summation of consumer surplus and producer surplus.

In the long run, competitive firms will not make economic profits.

In the long run, in perfectly competitive markets, equilibrium price will be equal to the firms long and short run average costs (both of which are at their minimums) and also to the marginal cost

Productive efficiency is achieved at the output where P = minimum AC.

Allocative efficiency occurs at the output where P = MC.

Market Failures - The defects in competitive markets that prevent them from achieving an efficient or equitable allocation of resources.

Public Goods - Goods or services whose benefits are not affected by the number of users and form which no one can be excluded.
Private Goods - Goods or services whose benefits can be denied to non buyers and whose consumption by one person reduces the amount available for others.
Nonrival Goods - One person's consumption does not reduce the amount available for others.
Non-Excludable Goods - A feature of certain goods that means that it is impossible or extremely costly to prevent non buyers from enjoying the benefits.
Quasi-Public Good - Private goods that are provided by governments because they involve extensive benefits for the general public.
External Costs - Costs that are incurred by people other than the producers or consumers of a product.
External Benefits - Benefits that are enjoyed by people other than the producers or consumers of a product.
Externalities - Benefits or costs of a product experienced by people who neither produce nor consume that product.

Three ways to deal with external costs :
-Legislative controls
-Taxation
-Cap and Trade

E101 - 6.4 - Competition

Monopoly - A market in which a single firm the monopolist is the sole producer.
Barriers to Entry - Obstacles that make it difficult for new participants to enter a market.
Perfect Price Discrimination - A situation where customers are charged the highest price they are willing to pay for each unit of a product bought.
Deadweight Loss - The total surplus losses relative to an efficient market due to market imperfections, taxes, or other factors.
Natural Monopoly - Single producer in a market usually with large economies of scale that is able to produce at a lower cost than competing firms could.
Public Utilities - Goods or services regarded as essential and therefore usually provided by government.

The monopolist can determine either the price or the quantity sold; It cannot determine both the price and quantity sold.

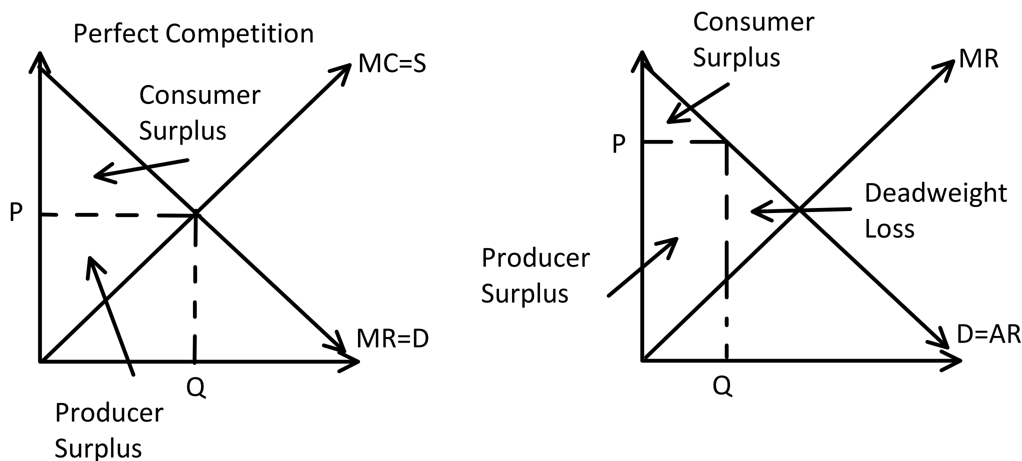
In order to increase its sales, a monopolist is forced to reduce its price, not just on the last units sold but on the whole of its output.

Total revenue is at a maximum when the marginal revenue is neither positive nor negative, that is when it is zero.

A monopolist will produce only where the demand is elastic.

Profits are maximized or loss is minimized add an output where MR = MC.

Monopolies charge higher prices than perfectly competitive firms.
Monopolies produce lower outputs than perfectly competitive firms, and these outputs are below economic capacity.
Monopolies, unlike perfect play competitive firms, may make economic profits in the short run and in the long run.



Imperfect Competition - A market structure in which producers are identifiable and have some control over price.
Product Differentiation - The attempt by a firm to distinguish its product from that of its competitors
Monopolistic Competition - A market in which there are many firms that sell a differentiated product.
Oligopoly - A market dominated by a few large firms
Concentration Ratio - A measurement of the percentage of an industry's total sales that is controlled by the largest few firms.