- On the other hand, if any unit adds more to cost than it does to revenue (i.e. MC>MR) then producing and selling that unit will decrease profits i.e. the firm should contract production.
- Thus it follows that a firm will leave output unaltered if the last unit produced adds the same amount to costs as it does to revenue.
- Thus assuming that it is worthwhile for the firm to produce, it should produce output for which marginal revenue (MR) equals marginal cost (MC) i.e. where MR = MC.

- **Prices and Output Determination in the Short Run**
- The equilibrium price is determined in the market by the interaction of supply and demand.
- The firm is a price taker and has to accept the ruling price as given and thus faces a perfectly elastic demand curve.
- The demand curve facing the firm is labeled D =AR = MR
- The firm produces where MC=MR and where MC is cutting MR from below.
- The profit maximizing level of output is oq1. At this level of output the equilibrium price OP1 is equal to MC.
- The average cost (ATC) at output level Q1 is Q1 B. Total cost is given by ATC multiplied by quantity represented by the area under OQ1BC.
- At the equilibrium level of output, the total revenue is represented by the area oP1AQ.
- Thus the firm is earning revenue in excess of total cost represented by the area CP1AB i.e. the firm is said to be earning super normal or abnormal profits.
- The same equilibrium of the firm can be shown using total cost curve and revenue curves.

- **Long-Run Equilibrium**
- The key to long-run equilibrium under perfect competition is free entry and free exit.
- In the short-run there are three possibilities: firms may be making profits, suffering losses or just breaking even.
- If firms are just breaking even(making normal profits) are doing as well as they could do by investing their capital elsewhere because costs include the opportunity cost of capital.
- Thus there will be no incentive for such firms to leave the industry.
- If however, existing firms are earning revenues in excess of all costs, other firms will enter the industry to share in these profits.
- The effect of new entrants on the supply curve is to shift the supply curve to the right and lower the equilibrium price.
- If existing firms are suffering losses they will leave the industry because a better return can be obtained else where in the economy.
- The effect of firms exiting the industry will shift the supply curve to the left and raise the equilibrium price for the remaining firms.
- Thus in the long run perfectly competitive firm earns only normal profit.

- **Sources of Monopoly Power**
- The following are some sources of monopoly power:
- Exclusive ownership and control of factor inputs e.g. raw materials. The monopolist may be the sole owner of a natural resource.
- Unless new supplies of the resource are discovered, there will be no possibility of new forms entering the industry.
- Patents rights. A monopoly may result from the holding of a patent on an invention or innovation.
- A patent confers sole production rights for a given period on those who have invested in research developments to enable them to earn a return on their investment.
- A copyright restricts the reproduction of printed or recorded material in a similar way.
- Legal monopolies. In some cases the state creates a monopoly by law e.g. Kenya Railways Corporation.
- In such a case, there are legal barriers that restrict rival firms from entering the industry.

Oligopoly

- Oligopoly is a market in which there are only few sellers.
- **Features:**
- There is mutual interdependence between all firms in the industry.
- Considerable barriers to entry;
- Prices are normally very sticky or slow to change;
- Firms are prone to collusion.
- Firms in this market structure can earn supernormal profits even in the long run.
- The market is dominated by few large firms.
- Oligopolies can be divided into two categories:
- i) Pure oligopolies produce homogenous products e.g. kerosene, cement industries.
- ii) Differentiated oligopolies produce differentiated products. Examples include manufacturers of automobiles, monocycles, television sets, electrical appliances etc.

- **Non Price Competition**
- Under monopolistic competition firms may try to retain or increase its above normal profits by engaging in some form of non-price competition. Non-price competition refers to strategies adopted by producers to give their products a competitive advantage other than a price cut.
- This might include advertising further expenditure on packaging to make the good appear more attractive to customers.
- **Oligopoly**
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Type of market	**No. of firms**	**Freedom of entry**	**Nature of product**	**Examples**
Perfect competition	Very many	Unrestricted	Homogeneous or identical	Approx. Cabbages, Carrots, Grains
Monopolistic competition	Many/ several	unrestricted	Differentiated	Builders, restaurants
Oligopoly	Few	Restricted	Undifferentiated or differentiated	Cement, cars, electronic appliances
Monopoly	One	Restricted or completely blocked	Unique	Local water company, train operators