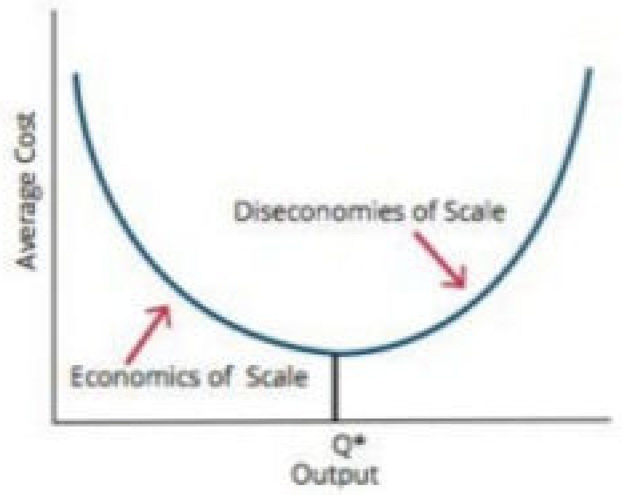
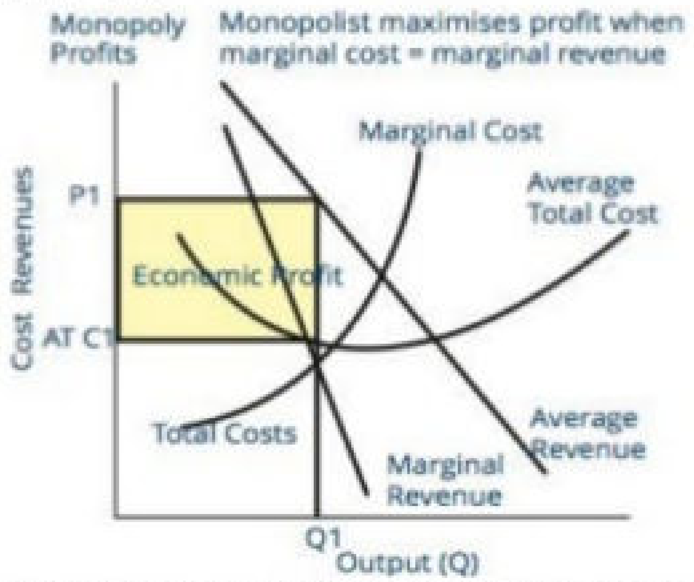
CHEAT SHEET

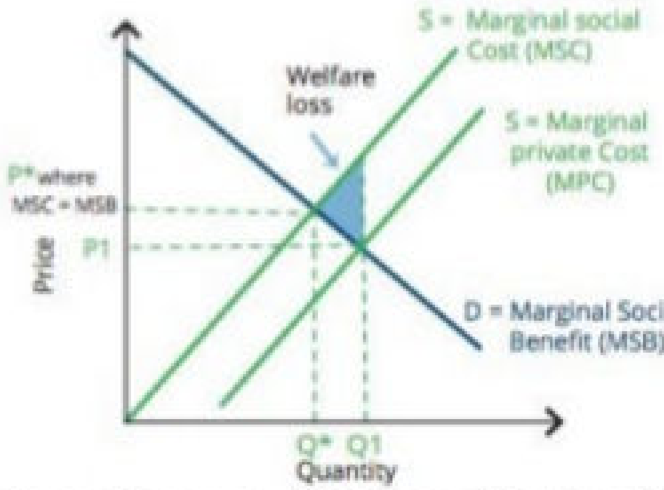


Monopolist's profit maximization rule –
$MR = MC$



MR **NOT** Price; higher production means price must be lowered to get sufficient demand; MR decreasing.
Price discrimination – charging different prices to different buyers for same good
Perfect price discrimination – Charging customers their exact reservation price

9 Thinking Strategically
A game has – players, strategies, payoffs
Dominant strategy – Gives highest payoff no matter what other players choose
Nash equilibrium – Every player has highest payoff given other player choices
Prisoner's dilemma – Every player has dominant strategy but they are all better off if all choose dominated strategy
The oligopoly prisoner's dilemma – Can agree to set price at monopolist profit maximizing level (form a cartel), but each has incentive to lower price to gain market share. Price war leads to lower profits for all.
10 Externalities and Common Resources
Externality – Cost (negative) or benefit (positive) to somebody not involved in activity. Causes deadweight loss (see graph)



Coase theorem – Problems with externalities are solved by people negotiating prices of property rights <u>**IF**</u> transaction costs are low
Government solutions to externalities – Regulations, market-based instruments (taxes, subsidies, cap and trade)

Common resources – Resources that it is difficult to exclude people from using (e.g. a lake)
Open access – When anybody can use a common resource
Tragedy of the commons – Common resources with open access are used by more and more people until total surplus drops to zero
Positional externalities - a change in one person's performance changes the expected reward of another in situations where reward depends on relative performance
Positional arms race – Positional externalities lead to series of continually offsetting investments in performance by 2 players, e.g. use of performance enhancing drugs in professional sport
11 Public Goods and their financing
Rivalry – Consumption of good by one person means there is less available for another
Excludability – People can be prevented from using a good if they don't pay

	Rivalrous	**Non-rivalrous**
Excludable	Private goods	Collective goods
Non-excludable	Common goods	Public goods

Free rider problem – people value public goods but avoid paying for them because they know they can't be excluded. Public goods don't get sufficient funding if too many people do this. Solved by taxes.
Head tax – Everybody pays same amount
Regressive tax – Proportion of income paid in taxes declines as income rises (head tax is regressive)
Proportional income tax - all taxpayers pay the same proportion of their incomes in taxes
Progressive tax - Proportion of income paid in taxes rises as income rises