AP Microeconomics

Revision Sheet · 考前速记

Learn these by heart before the exam. 考试前把这些内容背熟。

Basic Economic Concepts

Opportunity cost 机会成本: the next-best alternative given up; the real cost of every choice

PPC: bowed out means increasing opportunity cost (resources are not equally suited). A straight PPC means constant.

Comparative advantage 比较优势: lower opportunity cost; it, not absolute advantage, determines who should specialise

Marginal analysis: do it while marginal benefit exceeds marginal cost. Optimum is MB = MC.

Supply and Demand

Demand shifters: income, tastes, prices of related goods, expectations, number of buyers. A PRICE change moves ALONG the curve.

Supply shifters: input prices, technology, taxes/subsidies, expectations, number of sellers.

$E_d = \dfrac{\%\Delta Q_d}{\%\Delta P}$ $|E_d| > 1$ elastic, < 1 inelastic; ignore the minus sign when classifying 需求价格弹性

Elastic demand: a price cut RAISES total revenue. Inelastic: a price rise raises it.

$E_{XY} = \dfrac{\%\Delta Q_X}{\%\Delta P_Y}$, $E_i = \dfrac{\%\Delta Q}{\%\Delta \text{income}}$ cross positive means substitutes, negative means complements; income negative means inferior 交叉弹性与收入弹性

Consumer surplus is under demand and above price; producer surplus is above supply and below price.

A price CEILING below equilibrium causes shortage; a price FLOOR above it causes surplus. Both create deadweight loss.

Tax incidence falls more on the INELASTIC side. Elasticity, not the law, decides who pays.

Production, Cost, and Perfect Competition

$\text{MP} = \dfrac{\Delta Q}{\Delta L}$, $\text{AP} = \dfrac{Q}{L}$ diminishing marginal returns begin when MP starts to fall 边际产量与平均产量

$\text{ATC} = \dfrac{TC}{Q}$, $\text{AVC} = \dfrac{VC}{Q}$, $\text{MC} = \dfrac{\Delta TC}{\Delta Q}$ 平均成本与边际成本

MC cuts ATC and AVC at their MINIMUM points. That is not a coincidence: it is what pulls an average down.

Profit max at MR = MC for EVERY firm structure.

For perfect competition $P = MR = D$.

Shut down in the short run if $P < AVC$. Exit in the long run if $P < ATC$.

Long-run perfect competition: entry drives economic profit to ZERO; $P = MR = MC = \min ATC$. Allocatively AND productively efficient.

Accounting profit ignores implicit costs; economic profit subtracts them. Zero economic profit is normal profit.

Imperfect Competition

Monopoly: one seller, barriers to entry, price maker. MR lies BELOW D and falls twice as fast.

Monopoly is allocatively inefficient: $P > MC$ creates deadweight loss. It can keep long-run profit because entry is blocked.

Perfect price discrimination: charge each buyer their willingness to pay. No deadweight loss, no consumer surplus, output equals the competitive level.

Monopolistic competition: many firms, differentiated products, free entry. Long run: zero profit, but $P > MC$ and excess capacity.

Oligopoly: few firms, interdependent. Game theory: find each player's best response, then the Nash equilibrium (neither wants to switch alone).

Dominant strategy: best whatever the rival does. It may not exist; a Nash equilibrium can still.

Factor Markets

$\text{MRP} = \text{MP} \times P$ the firm's demand curve for labour 边际收益产品

Hire while MRP > MRC; stop where MRP = MRC. In a competitive labour market MRC equals the wage.

Monopsony: one buyer of labour. MRC lies ABOVE the supply curve, so it hires FEWER workers at a LOWER wage than competition.

$\dfrac{MP_L}{P_L} = \dfrac{MP_K}{P_K}$ for profit maximisation each ratio also equals $1/MR$ 最小成本组合

Market Failure and the Role of Government

Negative externality: MSC above MPC, market OVER-produces. Correct with a per-unit tax equal to the external cost.

Positive externality: MSB above MPB, market UNDER-produces. Correct with a subsidy.

Public good: non-rival and non-excludable. Free riding

means the market under-supplies it.

Common resource: rival but non-excludable; hence the tragedy of the commons.

Lorenz curve and the Gini coefficient measure income inequality: 0 is perfect equality, 1 perfect inequality.

Exam technique

Label EVERYTHING: axes, curves, equilibrium price and quantity, and shade the area you name (CS, PS, DWL).

Say the direction and the reason: 'demand shifts right because incomes rose and the good is normal'.

Correctly-labelled-diagram marks are free marks. Draw MR below D for any price maker, and put MC through the minimum of ATC.