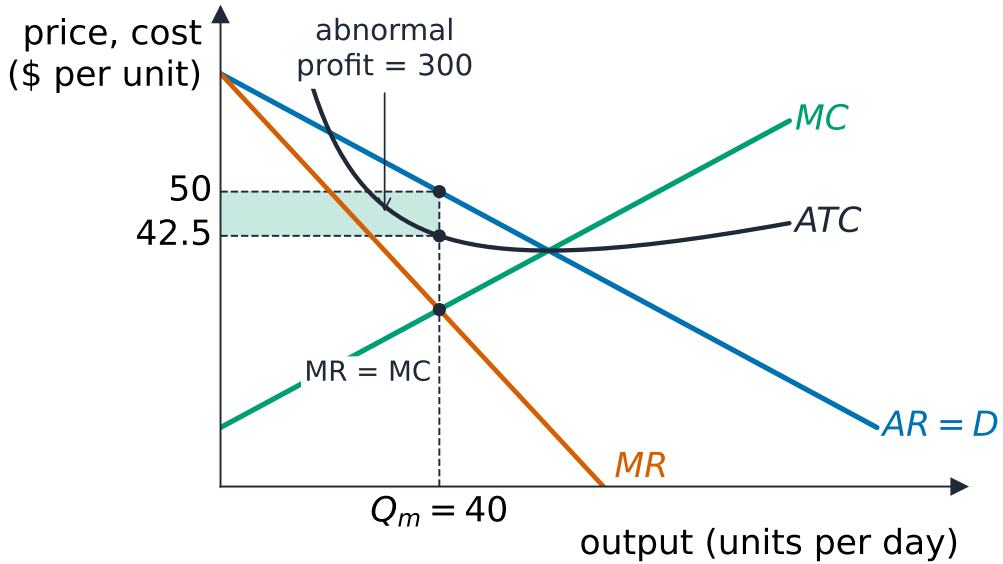
Exercise walk-through

4.1
HL market power and information: supported rehearsal

International Baccalaureate · IB Diploma · Economics · HL

Figure: Monopoly



- The monopolist produces where MR = MC and sets the price from the demand curve
- Match each part of the diagram to the text.

Government responses to market power

- **Competition law** : bans cartels and the abuse of a dominant position, and can block **mergers** that would create too much power. In 2017 the European Commission fined Google 2.42 billion euros for favouring its own shopping service in search results.
- **Regulation**: price caps and quality targets for natural monopolies such as water and electricity.
- **Fines** that are large enough to make breaking the law unprofitable.

Sources for this lesson

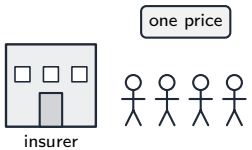
- International Baccalaureate, *Economics guide* (first assessment 2022).
- G. Akerlof, "The Market for 'Lemons': Quality Uncertainty and the Market Mechanism", *Quarterly Journal of Economics* (1970).
- State Administration for Market Regulation (China), decision on Alibaba Group, 10 April 2021.
- European Commission, *Google Shopping* decision (27 June 2017).

Exercises 2.1·2.2

2.1 Define asymmetric information and distinguish adverse selection from moral hazard by timing. [2]



2.2 Explain how a pooled insurance price causes adverse selection. [2]



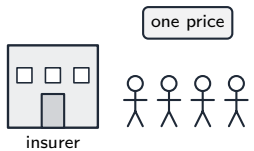
Exercises 2.1·2.2

2.1 Define asymmetric information and distinguish adverse selection from moral hazard by timing. [2]



2.1 One party to a transaction knows more than the other (1). Adverse selection operates BEFORE the contract (the informed side self-selects badly); moral hazard AFTER it (the protected side takes more risk) (1).

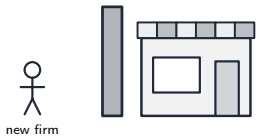
2.2 Explain how a pooled insurance price causes adverse selection. [2]



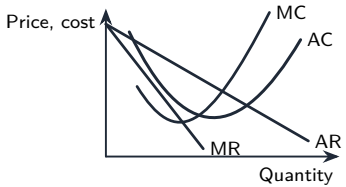
2.2 A single pooled premium is a bargain for high-risk customers and a poor deal for low-risk ones (1), so low-risks drop out, the risk pool worsens, the price rises, and more low-risks exit – until only high-risks remain and the market for low-risk cover vanishes (1).

Exercises 2.3·2.4

2.3 Name any four barriers to entry that sustain monopoly. [2]

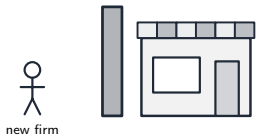


2.4 State the profit-maximisation condition and read the monopoly price from which curve. [2]



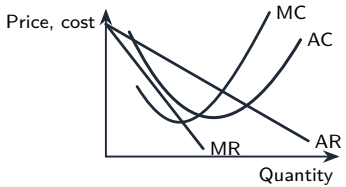
Exercises 2.3·2.4

2.3 Name any four barriers to entry that sustain monopoly. [2]



2.3 Any four of: legal barriers; patents; branding/marketing; control of essential resources; economies of scale; high start-up costs.

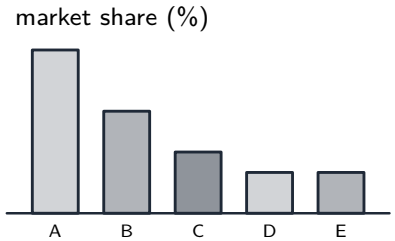
2.4 State the profit-maximisation condition and read the monopoly price from which curve. [2]



2.4 Produce where MR = MC; the price is read from the DEMAND (average revenue) curve at that output.

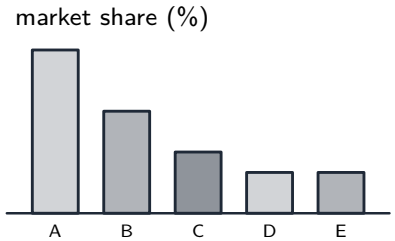
Exercise 2.5

2.5 Market shares are 40, 25, 15, 10 and 10 percent. Calculate the four-firm concentration ratio and one limitation of the measure. [3]



Exercise 2.5

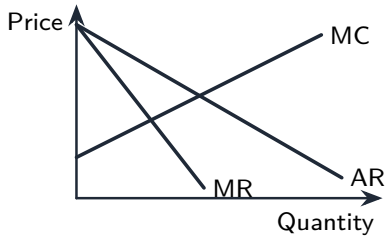
2.5 Market shares are 40, 25, 15, 10 and 10 percent. Calculate the four-firm concentration ratio and one limitation of the measure. [3]



2.5 CR4 $= 40 + 25 + 15 + 10 = 90\%$. Limitation (any one): it misses foreign competition; it says nothing about contestability; it ignores interdependence among the top four.

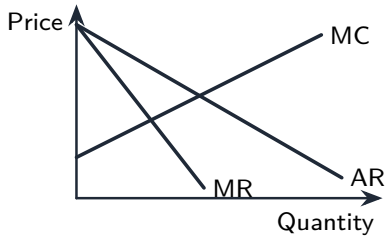
Exercise 3.1

3.1 *(Original.)* On AR $P = 70 - Q/2$, MR $P = 70 - Q$, MC $P = 10 + Q/2$ with ATC 42.5 at the profit-maximising output: find the output and price, calculate the supernormal profit, and find the deadweight loss against the competitive outcome. [5]



Exercise 3.1

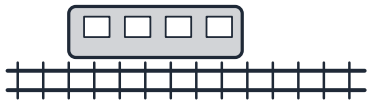
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3.1 MR = MC: $70 - Q = 10 + Q/2$ gives $60 = 1.5Q$, so $Q = 40$; price on AR: $P = 70 - 20 = 50$. Supernormal profit $= (50 - 42.5) \times 40 = 300$ per day. Competitive: $70 - Q/2 = 10 + Q/2$ gives $Q_c = 60$, $P_c = 40$. MC at $Q = 40$ is $10 + 20 = 30$, so deadweight loss $= \frac{1}{2} \times (60 - 40) \times (50 - 30) = \frac{1}{2} \times 20 \times 20 = 200$.

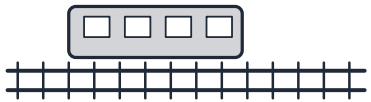
Exercise 3.2

3.2 *(Original.)* A rail network has falling average costs over the whole market. Explain why fragmenting it would raise costs, and evaluate one regulatory response. [3]



Exercise 3.2

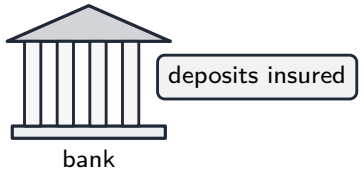
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3.2 With falling ATC, one network serves the whole market at the lowest average cost; splitting it into rivals duplicates the fixed network, raising each firm's average cost (natural monopoly). Regulatory response (any one, evaluated): price capping at marginal cost maximises output but may price below average cost and require subsidy; average-cost pricing breaks even but leaves some deadweight loss; state ownership aligns coverage with policy but weakens profit discipline.

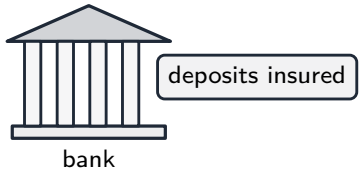
Exercise 3.3

3.3 *(Original.)* A bank's deposit insurance leads banks to lend more recklessly. Name the failure and one policy that limits it. [2]



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3.3 Moral hazard (the insured party takes more risk after the contract). Limiting policy: deductibles/excesses so banks bear part of the loss; capital requirements; or regulation of lending standards.

Local review guidance: the MR = MC equation, then price on AR, then the two welfare points; (R1 3.2) the response named with BOTH its gain and cost; the failure named as moral hazard specifically. This is authored classroom guidance.