Exercise walk-through

5.1
IGCSE production and labour

Pearson Edexcel · International GCSE · Economics

Government intervention

- **Correcting externalities.** The government has five main tools:
- China's national carbon market, started in 2021, gives permits to more than 2,000 power companies.
- **Competition policy.** Governments act to promote competition, limit **monopoly power**, protect consumers and control **mergers** and takeovers.
- In April 2021 China's market regulator fined Alibaba 18.2 billion yuan for forcing sellers not to use rival shopping platforms.

Data-response practice

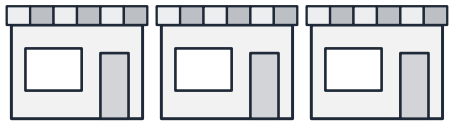
- (a) Calculate the percentage increase in the National Living Wage between April 2024 and April 2025. [2]
- (b) A café employs 10 workers on the minimum wage for 30 hours a week each. Calculate the increase in its weekly wage bill. [2]
- (c) With the help of a diagram, explain the possible effect of a minimum wage set above the equilibrium wage. [4]

Common errors (2)

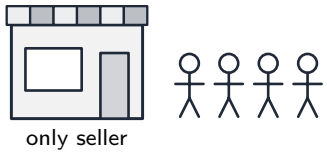
- On a labour diagram, labelling the axes price and quantity. Use wage rate and number of workers.
- Saying a minimum wage always causes unemployment. Only one set above the equilibrium wage does.
- Listing government tools without a disadvantage. Every tool has a cost or a weakness.

Exercises 2.1·2.2

2.1 State any three advantages of competition to consumers. [2]

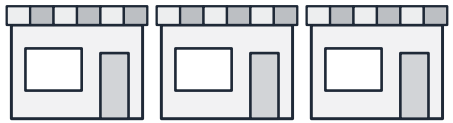


2.2 Define monopoly and name any three of its five barriers to entry. [2]



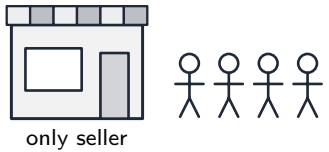
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2.1 Any three of: lower prices; greater choice; better quality; innovation; efficiency (lower costs passed on).

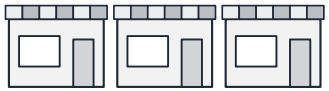
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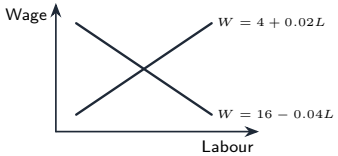
2.2 A market dominated by one firm (with a unique product, a price-maker). Barriers (any three): legal barriers; patents; marketing budgets; technology; high start-up costs.

Exercise 2.3

2.3 Define oligopoly and name one feature that separates it from perfect competition. [2]



2.4 Solve the labour model's equilibrium wage and employment. [3]

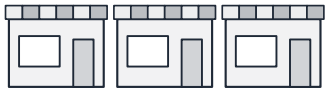


2.5 Name any four of the eight factors affecting labour supply. [2]

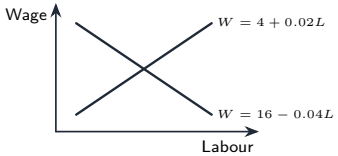


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Full solution on next slide

Full solution 2.3

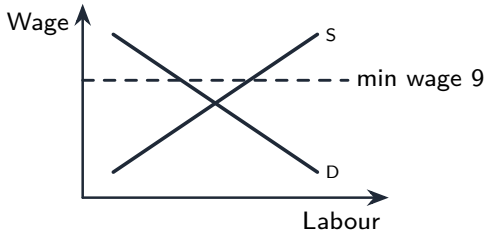
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2.4 $4+0.02L = 16-0.04L$ gives $0.06L = 12$, so $L = 200$ workers and $W = 4+0.02\times200 = 8$ per hour.

2.5 Any four of: population size; migration; age distribution; retirement age; school-leaving age; female participation; skills and qualifications; mobility.

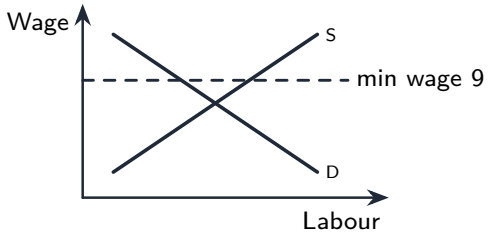
Exercise 3.1

3.1 *(Original.)* In the labour market S: $W = 4 + 0.02L$ and D: $W = 16 - 0.04L$, the government sets a minimum wage of 9. Calculate the labour demanded and supplied, and the unemployment created. [4]



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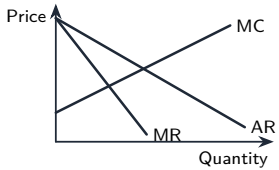
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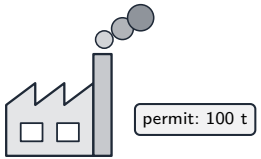
3.1 At $W = 9$: demand $16 - 0.04L = 9$ gives $L_d = 175$; supply $4 + 0.02L = 9$ gives $L_s = 250$. Unemployment $= 250 - 175 = 75$ workers – the minimum wage sits above equilibrium, so supply exceeds demand.

Exercise 3.2

3.2 *(Original.)* On the monopoly model AR: $P = 70 - Q/2$, MR: $P = 70 - Q$, MC: $P = 10 + Q/2$ with ATC $= 30$ at the profit-maximising output: find the output and price, and calculate the supernormal profit. [4]

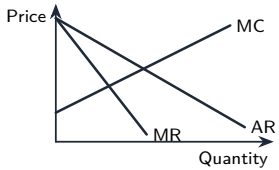


3.3 *(Original.)* Explain one advantage and one disadvantage of using a pollution permit scheme rather than a pollution tax. [4]

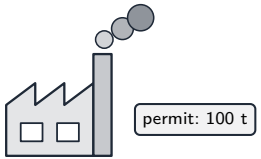


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3.2 MR = MC: $70 - Q = 10 + Q/2$ gives $60 = 1.5Q$, so $Q = 40$; price on AR: $P = 70 - 20 = 50$. Supernormal profit $= (P - ATC) \times Q = (50 - 30) \times 40 = 800$ per day.

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Full solution on next slide

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Full solution 3.2

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3.3 Permit advantage: the cap FIXES total emissions exactly – the environmental outcome is certain however firms respond, and firms with low clean-up costs sell permits to firms with high ones (cheapest abatement happens first). Disadvantage: the price of permits is uncertain and can swing, making business planning hard; setting the cap too loose fails, and initial allocation can reward the biggest past polluters – a tax instead fixes the PRICE per unit and is simple to collect, but leaves the total uncertain.

Local review guidance: both labour quantities before the unemployment figure; the monopoly chain MR = MC → price on AR → profit rectangle; (R1) the permit-vs-tax contrast is EXACTLY certainty of quantity vs certainty of price. This is authored classroom guidance.