6 The table shows the estimated price elasticity of supply for three commodities.

Commodities	Estimates of price elasticity of supply
Corn	+0.23
Rice	+0.27
Wheat	+0.31

(Source: http://ageconsearch.umn.edu/bitstream/19267/1/sp05zh01.pdf)

Which **one** of the following can be deduced from the table?

☒ **A** Corn, rice and wheat have price elastic supply

☒ **B** A 10% increase in the price of corn will cause a 23% increase in quantity supplied

☒ **C** A 10% increase in the price of rice will cause a 2.7% decrease in quantity supplied

☒ **D** A 10% increase in the price of wheat will cause a 3.1% increase in quantity supplied

(Total for Question 6 = 1 mark)

10 The table shows the average annual income for workers in Singapore and the quantity of new car sales in Singapore in 2016 and 2017.

	2016	2017
Average annual income	S$65 796	S$67 032
Quantity of new car sales	109 091	112 114

Using the data in the table, *ceteris paribus*, calculate the income elasticity of demand for new cars in Singapore. Show your workings.

DO NOT WRITE IN THIS AREA

3 The table shows the estimated cross elasticity of demand in Indonesia for four goods with respect to a change in the price of rice.

Goods	Cross elasticity of demand
Vegetables	–0.05
Meat	–0.19
Fish	+0.40
Maize	+1.25

(Source adapted from https://econbeh.blogspot.com/2019/05/some-estimates-of-cross-price-elasticity.html)

Which **one** of the following can be deduced from the table?

☒ **A** Vegetables and rice are normal goods

☒ **B** Meat and rice are inferior goods

☒ **C** Fish is a complement for rice

☒ **D** Maize is a substitute for rice

(Total for Question 3 = 1 mark)

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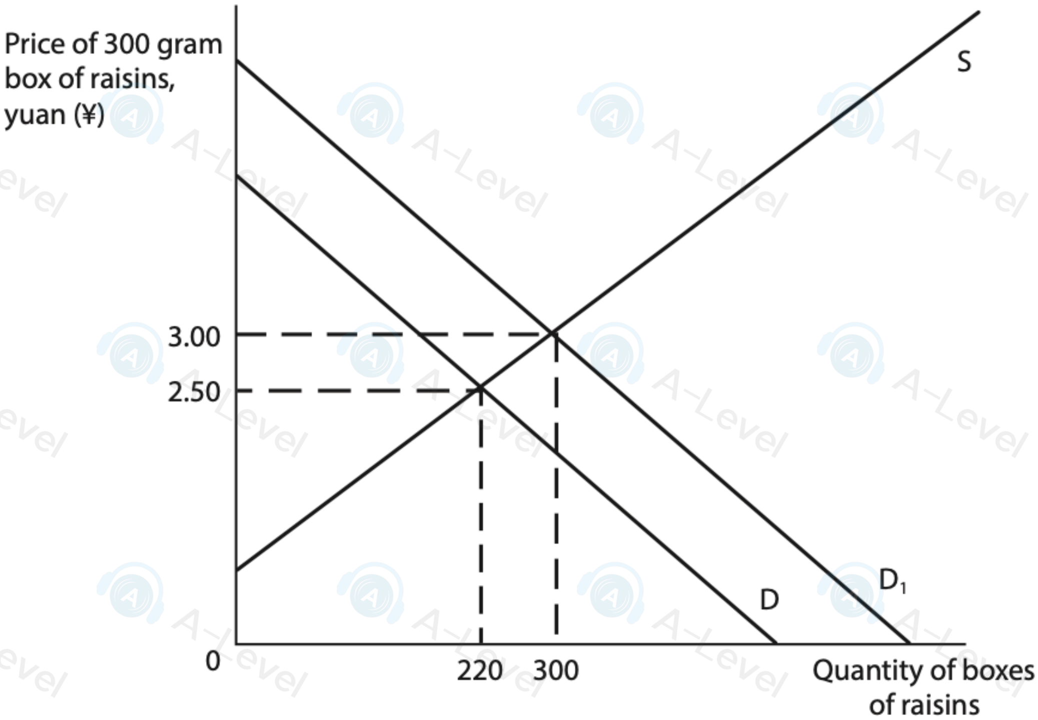
4 The diagram shows the market for 300 gram boxes of raisins in China.



Which **one** of the following is the price elasticity of supply for boxes of raisins when the demand curve shifts from D to D_1?

- ☒ **A** −1.82
- ☒ **B** −0.55
- ☒ **C** +0.55
- ☒ **D** +1.82

(Total for Question 4 = 1 mark)

6 The table shows the estimated income elasticity of demand for selected food items in the UK.

Food item	**Income elasticity of demand**
Butter	+0.20
Coffee	+0.16
Margarine	–0.37
Tea	–0.02

(Source: https://pdfs.semanticscholar.org/c384/d29d9fb4993d265c9bed5be20f6d984b09c3.pdf)

Which **one** of the following can be deduced from the data?

☒ **A** A decrease in real income will result in a more than proportionate decrease in demand for butter

☒ **B** An increase in real income will result in a less than proportionate increase in demand for coffee

☒ **C** A decrease in real income will result in a more than proportionate increase in demand for margarine

☒ **D** An increase in price will result in a less than proportionate decrease in demand for tea

(Total for Question 6 = 1 mark)

6 The table shows the estimated income elasticity of demand for various items.

	Income elasticity of demand
Cars	+2.46
Furniture	+1.48
Petrol	+0.48
Public transport	–0.37

Which **one** of the following can be deduced from the table?

☒ **A** A 10% increase in income leads to a 24.6% decrease in demand for cars

☒ **B** A 10% increase in income leads to a 14.8% decrease in demand for furniture

☒ **C** A 5% increase in income leads to a 2.4% increase in demand for petrol

☒ **D** A 5% increase in income leads to a 1.85% increase in demand for public transport

(Total for Question 6 = 1 mark)

11 The cross elasticity of demand of milk with respect to sugar-sweetened drinks is +0.25.

Explain the likely impact of a 5% increase in the price of sugar-sweetened drinks on the market for milk.

10 The table shows the global volume of olive oil produced in tonnes and the global price of olive oil per tonne in 2021 and 2022.

Year	Volume of olive oil produced in tonnes	Price of olive oil, per tonne
2021	2.93m	$4 125
2022	3.27m	$5 145

Ceteris paribus, calculate the price elasticity of supply for olive oil. Show your workings.

9 In 2021 the global price of cotton increased substantially. This resulted in an increase in the price of a cotton t-shirt from $1.50 to $2.

Rising fertiliser costs caused farmers to switch from growing wheat for bread production to growing wheat for animal feed that requires less fertiliser.

With reference to the information given, explain the difference between the rationing function and the incentive function of the price mechanism.

10 The table shows the average world price of cocoa per metric tonne and the quantity supplied globally in 2020 and 2021.

Year	Average world price of cocoa per metric tonne	Quantity of cocoa supplied, metric tonnes
2020	$ 2 131	4 741 000
2021	$ 2 770	5 242 000

Ceteris paribus, calculate the price elasticity of supply for cocoa. Show your working.

9 The table shows the cross elasticity of demand for biscuits and cold soft drinks with respect to a change in the price of hot drinks.

	Cross elasticity of demand with respect to a change in the price of hot drinks
Biscuits	–0.47
Cold soft drinks	+0.43

With reference to the information given, explain the difference between substitutes and complements.

6 The table shows the cross elasticity of demand for selected drinks with respect to sugar-sweetened drinks in Chile.

Drink	Cross elasticity of demand
Water	+0.63
Milk	+0.25
Coffee	+0.12

(source: https://bmcpublichealth.biomedcentral.com/articles/10.1186/s12889-017-4098-x/tables/5)

Which **one** of the following can be deduced from the table?

☒ **A** The demand for coffee will be most responsive to a change in the price of sugar-sweetened drinks

☒ **B** The demand for water will be most responsive to a change in the price of sugar-sweetened drinks

☒ **C** An increase in the price of sugar-sweetened drinks will lead to a more than proportionate increase in the demand for milk

☒ **D** An increase in the price of sugar-sweetened drinks will lead to a decrease in the demand for water, milk and coffee

(Total for Question 6 = 1 mark)

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11 The cross elasticity of demand for Pepsi cola with respect to Coca Cola is estimated to be +1.24.

Explain the likely impact of a 10% increase in the price of Coca Cola on the demand for Pepsi cola.

10 The table shows the estimated income elasticity of demand for flights in developed countries and in developing countries.

	Income elasticity of demand	Percentage change in real income 2022	
Developed countries	+1.5	+2.5%	
Developing countries	+2.0	+3.4%	

Ceteris paribus, calculate the difference between the percentage change in quantity demanded for flights within **developed countries** and the percentage change in quantity demanded for flights within **developing countries**.

Show your workings. You may use the last column for your calculations.

11 The cross elasticity of demand for meat with respect to fish is estimated to be +0.13 in Bangladesh.

Explain the likely impact of a 10% increase in the price of fish on the demand for meat in Bangladesh.

10 The table shows average household income per month in Singapore and the total quantity of cinema tickets purchased by its citizens in 2020 and 2021.

Year	Average household income	Quantity of cinema tickets
2020	S$4022	4.7 million
2021	S$4166	7.6 million

(Source: adapted from https://www.statista.com/statistics/199983/us-vehicle-sales-since-1951/ and https://dqydj.com/individual-income-by-year/#:~:text=Average%20Individual%20Income%20by%20Year%20%20%20Year,%20%20%2463%2C214.03%20%2056%20more%20rows%20)

Ceteris paribus, calculate the income elasticity of demand for cinema tickets. Show your working.

10 The table shows the gross weekly earnings of Chinese workers and the number of visits abroad by Chinese citizens in 2016 and 2017.

	2016	2017
Gross weekly earnings (income)	¥1 299	¥1 373
Number of visits abroad by Chinese citizens	122 million	127 million

(Source: https://ieconomics.com/china-wages and https://www.travelchinaguide.com/tourism/2016statistics/outbound.htm)

Using the data in the table, calculate the income elasticity of demand for visits abroad by Chinese citizens. Show your workings.

3 The table shows the estimated income elasticity of demand for four items.

Item	Income elasticity of demand
Caribbean holidays	+2.02
Healthcare	+0.70
Electricity	+0.40
Bus travel	–0.70

Which **one** of the following can be deduced from the table?

☒ **A** Caribbean holidays are an inferior good

☒ **B** Demand for healthcare is income elastic

☒ **C** Electricity is a normal good

☒ **D** Demand for bus travel is price inelastic

(Total for Question 3 = 1 mark)

3 The cross elasticity of demand for Pepsi Cola with respect to a change in the price of Coca-Cola is estimated to be +0.62 in North America.

Which **one** of the following can be deduced from this information?

☒ **A** Pepsi Cola and Coca-Cola are complements

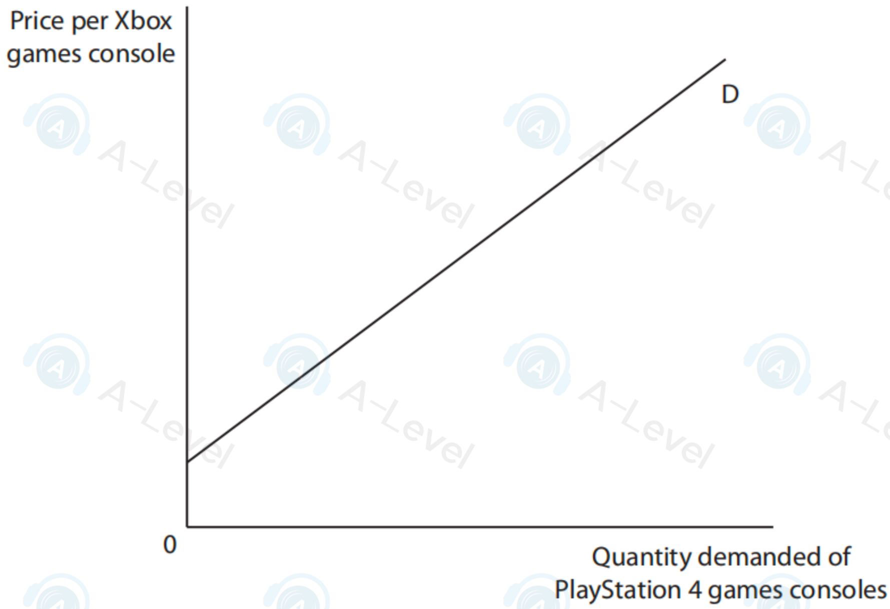
☒ **B** Pepsi Cola and Coca-Cola are substitutes

☒ **C** Pepsi Cola and Coca-Cola are unrelated goods

☒ **D** Pepsi Cola and Coca-Cola are normal goods

(Total for Question 3 = 1 mark)

5 The diagram shows the relationship between the price of Xbox games consoles and the quantity demanded of PlayStation 4 games consoles.



It can be deduced from the diagram that the two goods are

☒ **A** complementary goods

☒ **B** inferior goods

☒ **C** substitute goods

☒ **D** unrelated goods

(Total for Question 5 = 1 mark)

6 The table shows the cross elasticities of demand for selected vehicle types with respect to the price of diesel vehicles in Norway.

Vehicles	**Cross elasticity of demand**
Battery electric	+0.48
Hybrid	+0.32

(Source: adapted from https://etrr.springeropen.com/articles/10.1186/s12544-020-00454-2/figures/6)

Which **one** of the following can be deduced from the table?

☒ **A** A 10% increase in the price of diesel vehicles will result in a 4.8% decrease in the quantity of battery electric vehicles demanded

☒ **B** A 10% increase in the price of diesel vehicles will result in a 0.32% increase in the quantity of hybrid vehicles demanded

☒ **C** A 5% increase in the price of diesel vehicles will result in a 3.2% decrease in the quantity of hybrid vehicles demanded

☒ **D** A 5% increase in the price of diesel vehicles will result in a 2.4% increase in the quantity of battery electric vehicles demanded

(Total for Question 6 = 1 mark)

14 Between Q4 2016 and Q4 2019 the global price of gold increased from $1 275 to $1 481 per ounce. Over the same period, the global supply of gold increased from 888.8 tonnes to 889.5 tonnes. Only 10 countries mine 62% of global output.

Evaluate reasons why the supply of gold is price inelastic.

(Total for Question 14 = 20 marks)

10 The table shows the gross weekly income for workers in the UK and the number of visits abroad by UK citizens in 2016 and 2017.

	2016	**2017**
Gross weekly income	£539	£550
Number of visits abroad by UK citizens	70.8 million	72.7 million

(Source: adapted from https://www.ons.gov.uk/ © Crown Copyright)

Based on the data in the table, calculate the income elasticity of demand for visits abroad by UK citizens. Show your workings.

10 The cross elasticity of demand for tea with respect to a change in the price of coffee is +0.52. Between March 2019 and March 2020 the price of coffee increased by 32%.

Ceteris paribus, calculate the percentage change in the quantity demanded of tea following the change in the price of coffee. Show your workings.

10 The table shows the average income and car sales in the USA in 2011 and 2021.

	Average income	**Car sales**
2011	$31 024	12 741 800
2021	$44 225	14 926 900

(Sources adapted from: https://www.statista.com/statistics/199983/us-vehicle-sales-since-1951/ and https://dqydj.com/individual-income-by-year/#:~:text=Average%20Individual%20Income%20by%20Year%20%20%20Year,%20%20%2463%2C214.03%20%2056%20more%20rows%20)

Ceteris paribus, calculate the income elasticity of demand for cars between 2011 and 2021. Show your working.

10 The table shows the quantity of coffee beans supplied globally and average coffee bean prices in 2019 and 2020.

	Average price of coffee beans, per pound (lb)	Quantity of coffee beans supplied, million bags
2019	$1.36	169.0
2020	$1.02	167.4

Ceteris paribus, calculate the price elasticity of supply for coffee beans. Show your workings.

6 In 2022 average house prices in China decreased by 2.1%. Research into the housing market in China estimated that the price elasticity of supply for new houses was 2.8.

Ceteris paribus, which **one** of the following can be deduced from this information?

☒ **A** The supply of new houses would decrease by 5.88%

☒ **B** The supply of new houses would increase by 5.88%

☒ **C** The supply of new houses would increase by 1.33%

☒ **D** The supply of new houses would decrease by 1.33%

(Total for Question 6 = 1 mark)

3 In the Netherlands the cross-elasticity of demand for organic meat with respect to a change in the price of non-organic meat is +0.5.

Which **one** of the following can be deduced from this information?

☒ **A** Organic meat and non-organic meat are substitutes

☒ **B** Organic meat and non-organic meat are normal goods

☒ **C** Organic meat and non-organic meat are unrelated goods

☒ **D** Organic meat and non-organic meat are complements

(Total for Question 3 = 1 mark)

10 The table shows the average world price of wheat per metric tonne and the quantity of wheat supplied globally in 2019 and 2020.

	Average wheat price per metric tonne	Quantity of wheat supplied, metric tonnes
2019	$152.97	732 million
2020	$176.48	777 million

Ceteris paribus, calculate the price elasticity of supply of wheat. Show your workings.

6 The diagram illustrates the relationship between the price of PlayStation 5 games consoles and the quantity demanded of Xbox Series X games consoles.

Which **one** of the following can be deduced from the diagram about the relationship between PlayStation 5 games consoles and Xbox Series X games consoles?

☒ **A** They are substitutes

☒ **B** They are complements

☒ **C** They are unrelated goods

☒ **D** They are inferior goods

(Total for Question 6 = 1 mark)

10 The table shows the number of new car sales and the average annual earnings per person in China for 2021 and 2022.

Year	Number of new car sales	Average annual earnings per person
2021	21.52 m	¥106 837
2022	23.56 m	¥114 029

Ceteris paribus, calculate the income elasticity of demand for new cars.
Show your workings.

6 The table shows the estimated cross elasticity of demand for selected drinks with respect to a change in the price of soft drinks in Chile.

Drink	Cross elasticity of demand
Milk	+0.25
Coffee	+0.10
Water	+0.63

Which **one** of the following can be deduced from this information?

☒ **A** All three goods are complements of soft drinks

☒ **B** All three goods are substitutes for soft drinks

☒ **C** All three goods are normal goods

☒ **D** All three goods are luxury goods

(Total for Question 6 = 1 mark)

6 In a particular year, a 4% rise in real incomes caused the demand for cinema tickets to increase from 250 000 to 290 000.

Which **one** of the following shows the value of income elasticity of demand?

☒ **A** –4.00

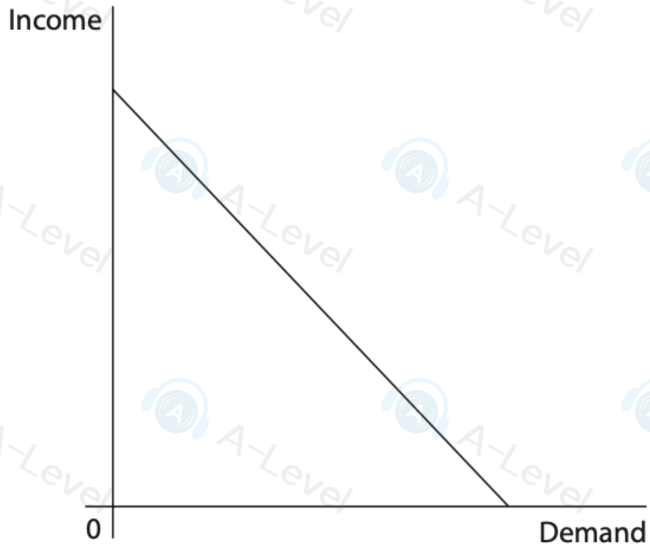
☒ **B** –0.25

☒ **C** +0.25

☒ **D** +4.00

(Total for Question 6 = 1 mark)

6 The diagram shows the relationship between **income** and the demand for potatoes.



Which **one** of the following can be deduced from this diagram?

A Potatoes are an inferior good

B Potatoes are a normal good

C Demand for potatoes is income inelastic

D Demand for potatoes is income elastic

(Total for Question 6 = 1 mark)

6 The table shows the estimated cross elasticities of demand for selected types of vehicle with respect to a change in the price of petrol vehicles in Norway.

Types of vehicles	Cross elasticity of demand
Electric	+0.19
Plug-in hybrid	+0.25
Diesel	+0.64

(Source: adapted from https://etrr.springeropen.com/articles/10.1186/s12544-020-00454-2)

Ceteris paribus, which **one** of the following can be deduced from this information?

☒ **A** All three types of vehicle are normal goods

☒ **B** All three types of vehicle are inferior goods

☒ **C** All three types of vehicle are complements of petrol vehicles

☒ **D** All three types of vehicle are substitutes for petrol vehicles

(Total for Question 6 = 1 mark)

10 The table shows the average price of green coffee beans and the global output of green coffee beans in February 2023 and in February 2024.

	Price of green coffee beans per lb	**Output of green coffee beans (tonnes)**
February 2023	$1.61	8 510 000
February 2024	$1.82	11 550 000

Ceteris paribus, calculate the price elasticity of supply for green coffee beans.

Show your workings.

3 In North America the cross elasticity of demand for coffee with respect to a change in the price of milk was estimated to be –0.04.

Which **one** of the following can be deduced from this information?

☒ **A** Coffee and milk are inferior goods

☒ **B** Coffee and milk are substitute goods

☒ **C** Coffee and milk are unrelated goods

☒ **D** Coffee and milk are complementary goods

(Total for Question 3 = 1 mark)

5 The table shows the estimated price elasticity of supply for cotton in selected countries.

Australia	0.46
Egypt	0.16
India	0.31
Mexico	1.08

(Source: http://www.fao.org/3/a-ah470e.pdf)

Which **one** of the following can be deduced from the table?

☒ **A** Supply is price elastic in India

☒ **B** Supply is price inelastic in Mexico

☒ **C** Supply is least responsive to a change in price in Egypt

☒ **D** Supply is most responsive to a change in price in Australia

(Total for Question 5 = 1 mark)