

JC BUSINESS



HUB

WORKBOOK SOLUTIONS



Markets And The Black Market

Q1 Choose the correct word from the options below to complete the sentences.

1. **BUYERS** create **DEMAND** in a market because they want to buy goods or services
2. **SELLERS** create **SUPPLY** in a market because they want to produce or sell goods or services to make money.
3. The level of demand and supply will influence **PRICES** in a **MARKET**.

Q2 Place a ✓ in the correct box (true or false) for each statement about the black market.

Statement	TRUE	FALSE
Participation in the black market is illegal	✓	
Consumers have the same legal rights when purchasing goods or services in the black market		✓
The government loses out on tax from transactions in the black market	✓	
The black market is beneficial for businesses in Ireland		✓
Goods purchased in the black market are likely to be as safe as those purchased in businesses		✓

Q3 (i) Explain what the black market is

The black market is where illegal transactions take place that are not recorded by the government, so no taxes are paid

Q3 (ii) Give an example of a transaction that might take place in the black market

Buying counterfeit designer goods (e.g. fake handbags/trainers) or buying a dodgy box for TV/sport

Q3 (iii) Outline one negative for Irish consumers that buy a good or service in the black market.

Consumers lose their strong legal consumer rights
 Consumers have less chance of a refund/exchange for faulty goods
 Products may be unsafe / not match safety regulations legitimate businesses have to meet

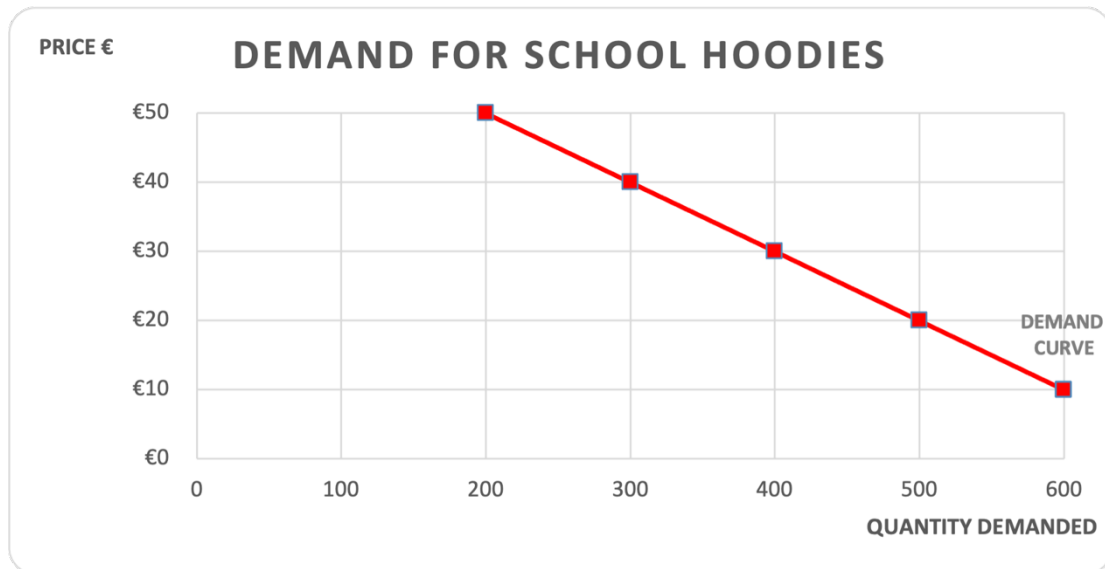


Demand and Understanding demand from a diagram

Q4 State what the law of demand is

When the prices for goods or services fall, the quantity demanded for them rises; when prices rise, quantity demanded falls

Q5 Study the graph below and then answer the questions that follow



(i) Identify the quantity demanded for hoodies when the price is €40

300 units

(ii) Identify the quantity demanded for hoodies when the price is €20

500 units

(iii) Identify the price for hoodies when the quantity demanded is 200 hoodies

€50

(iv) How much does the quantity demanded fall by if the price for hoodies increased from €30 to €40? Show your workings

$400 - 300 =$ falls by 100 units

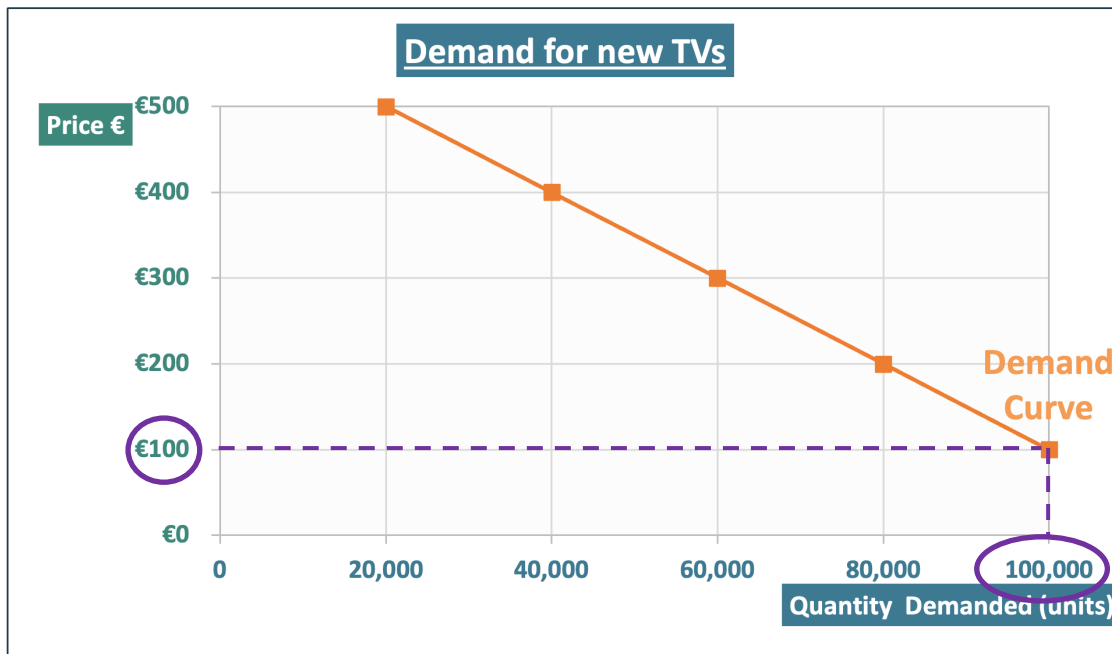


Plotting demand curves on a diagram

Price (€)	Quantity Demanded (units)
€100	100,000
€200	80,000
€300	60,000
€400	40,000
€500	20,000

Q6 Using the data from the table above, plot the demand curve on the graph below for new TVs

Make sure to plot each data point clearly (you should have 5 points), then connect all of the points with one line, and then label the demand curve "D"



(i) From either the table or graph, identify the quantity demanded for TVs when the price is €400.

40,000 units

(ii) By how much does the quantity demanded for TVs increase if the price was to drop from €500 to €300? Show your workings

20,000 -> 60,000 = 40,000 units

(iii) On your graph, identify the price and quantity demanded for new TVs when the price is €100 by drawing a dotted line from the price to the demand curve, and then down to the quantity demanded.



Substitute Goods and Complementary Goods

Q7 Indicate whether the following items are substitutes for or complementary to a **cup of coffee** with a ✓ in the correct box

	Substitute	Complementary
A cup of tea	✓	
Milk & sugar		✓
A pastry		✓
An energy drink e.g. Monster	✓	

Q8 (i) Indicate whether the following items are likely to be substitutes for or complementary to a **chicken fillet roll bought in a local deli**.

	Substitute	Complementary
A breakfast roll	✓	
A bottle of water		✓
A sausage roll	✓	
Crisps		✓

Q8 (ii) Pick one item from part (i) and explain the reason why it is a substitute or complement to a chicken fillet roll (*Note: you should explain what a substitute or complementary good is to explain it properly*)

Item: A breakfast roll

Reason: It is a replacement / alternative for it, a breakfast roll could be bought instead of a chicken fillet roll.

Q9 Indicate whether the following pairs of items are substitutes for or complementary for each other with a ✓ in the correct box

	Substitutes	Complementary
Spotify and Apple Music	✓	
A smartphone and mobile data		✓
PlayStation and Xbox	✓	
Football boots and shin guards		✓



Q10 Indicate whether the following pairs of items are substitutes for or complementary for each other with a ✓ in the correct box

	Substitutes	Complements
Netflix and Disney+	✓	
An Android phone and Android Apps		✓
A Tesla and a Volvo	✓	
A printer and ink cartridges		✓

Q11 Explain the term 'substitute good' and give an example of a substitute good for milk. Give a reason for your choice of substitute.

Explain: A replacement/alternative for another good

Example: A plant-based milk (e.g. oat milk) is a substitute for milk

Reason: It can be used for the same purpose instead of milk e.g. when drinking / eating cereal /drinking tea or coffee

Q12 Explain the term 'complementary good' and give an example of a complementary good for milk. Give a reason for your choice of complement.

Explain: A good used together with another good (having one adds value to the other)

Example: An iPhone cover is a complementary good for an iPhone

Reason: Consumers usually buy and use both together - the cover is used together/adds value to the iPhone when used together to protect it.



Factors that increase or decrease demand

Q13 Show the impact of the following on the demand for PlayStation 5 consoles. Place a ✓ in the correct box

	Increased demand for PlayStation 5	Decreased demand for PlayStation 5
The price of PS5 games falls	✓	
A recession causes income levels to fall		✓
Lots of online endorsers promote PS5 consoles on their YouTube and Twitch channels	✓	
A new Nintendo console launches		✓

Q14 Place a ✓ in the correct box (true or false) for each statements about demand.

	TRUE	FALSE
When prices fall, demand usually falls		✓
An increase in income levels will increase demand for most goods	✓	
Demand will fall for iPhone covers when the price of iPhones goes up	✓	
Demand will fall for Nike runners when the price of Adidas runners goes up		✓
A demand curve normally slopes downward from left to right	✓	



EXAM CORNER

Explain two factors which affect the demand for Taylor Swift concert tickets.

Answer 1: Availability – the tickets will be scarce for the concerts for her.

Answer 2: It would depend on the price of a substitute good for her concerts.

Answer 3: Price of complementary good – If prices for hotel rooms on the dates of the concerts increased the demand for concert tickets would fall as its more expensive to travel and stay for the concerts.

0/3

SCARCITY WOULD EFFECT THE PRICE, NOT THE DEMAND

1-2/3

NO EXPLANATION GIVEN

3/3

FACTOR + EXPLANATION GIVEN



Q15 Explain **two** factors that might **increase** the demand for a local takeaway pizza restaurant

Factor: Increase in disposable income

Explanation: When people have more disposable income (money to spend), they are more willing to spend money on takeaways, increasing demand for local takeaway pizza .

Factor: Positive online reviews / social media promotion

Explanation: Good reviews and strong social media promotion by the local takeaway pizza restaurant can help attract more customers, increasing demand.

Factor: More expensive substitute goods

Explanation: If prices increase in other local restaurants, more consumers might go for pizza which is now relatively cheaper

Factor: Cheaper complementary good

Explanation: If the delivery app that delivers the pizza decreases in price, more consumers might now order pizza using it as it is cheaper.

Q16 Explain **two** factors that might **decrease** the demand for a computer game

Factor: Increase in price

Explanation: If the price of the computer game increases, fewer consumers will be willing to buy it, reducing demand for the game.

Factor: Cheaper substitute goods

Explanation: If competing games become cheaper, more consumers may switch to these instead, reducing demand for the computer game.

Factor: Negative reviews / poor publicity

Explanation: Bad reviews or negative publicity about the game can discourage consumers from buying it, reducing demand.

Factor: Decrease in disposable income

Explanation: When people have less disposable income (money to spend), they are less willing and able to spend money on non-essential items like computer games, reducing demand.

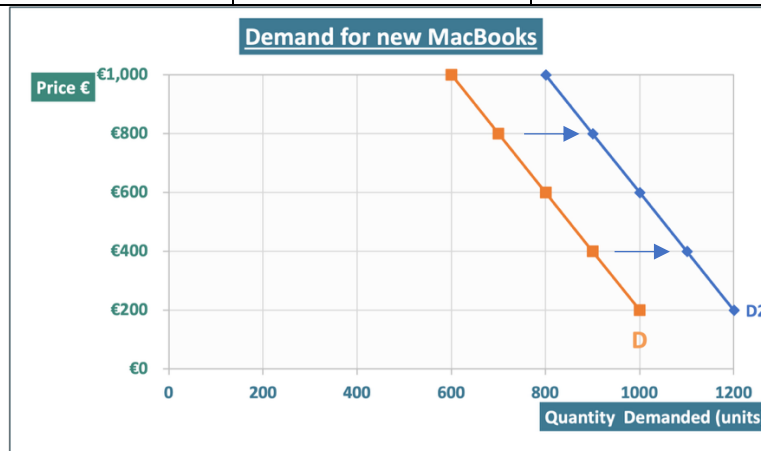
Top Tip: Make sure to focus on how the factor you choose impacts the **demand** for a good or service, not how it might impact on the market price or supply.



Shifts in demand

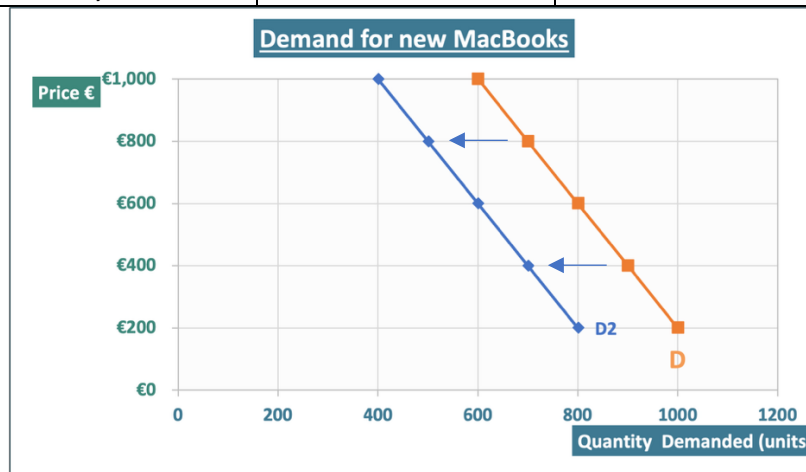
Q17 Great online reviews have increased the demand for the new MacBook. The original demand curve is shown on the graph. Draw the new demand curve using the data below.

Demand for new MacBooks		
Price (€)	Quantity Demanded (units) 000s	NEW Quantity Demanded (units) 000s
€200	1000	1200
€400	900	1100
€600	800	1000
€800	700	900
€1,000	600	800



Q18 Dell have announced a large price drop for their latest laptop, offering customers a cheaper substitute for their MacBook. Draw the new demand curve using the data below.

Demand for new MacBooks		
Price (€)	Quantity Demanded (units) 000s	NEW Quantity Demanded (units) 000s
€200	1000	800
€400	900	700
€600	800	600
€800	700	500
€1,000	600	400

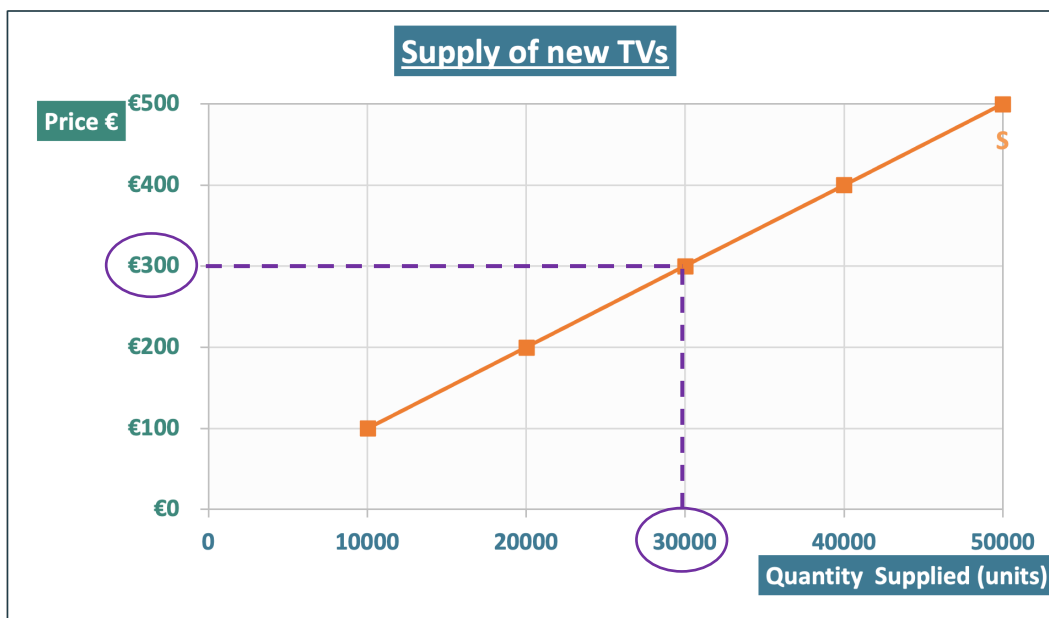


Plotting supply curves on a diagram

Price (€)	Quantity Supplied (units)
€100	10,000
€200	20,000
€300	30,000
€400	40,000
€500	50,000

Q19 Using the data from the table above, plot the supply curve on the graph below for new TVs

Make sure to plot each data point clearly (you should have 5 points), then connect all of the points with one line, and then label the supply curve "S"



(i) From either the table or graph, identify the quantity supplied of TVs when the price is €400.

40,000 units

(ii) By how much does the quantity supplied for TVs change if the price was to decrease from €500 to €300? Show your workings

$50,000 - 30,000 = \text{decrease of } 20,000 \text{ units}$

(iii) On your graph, identify the price and quantity supplied for new TVs when the price is €300 by drawing a dotted line from the price to the supply curve, and then down to the quantity supplied.



Factors that can increase or decrease supply

Q20 What impact would the following have on the supply of drinks at a coffee shop. Place a tick ✓ in the correct box

	Increased supply of drinks	Decreased supply of drinks
The price of takeaway coffee falls		✓
The cost of coffee beans increases		✓
VAT on hot drinks is reduced	✓	
Staff shortages reduce opening hours		✓

Q21 What impact would the following have on the supply of O’Neill’s GAA Jerseys. Place a tick ✓ in the correct box

	Increased supply O’Neill’s Jerseys	Decreased supply O’Neill’s Jerseys
The government reduces VAT on sports clothing	✓	
O’Neill’s installs new automated printing machines	✓	
The cost of fabric and printing ink increases		✓
The selling price of jerseys rises	✓	

Q22 Place a ✓ in the correct box (true or false) for each statements about the supply of Penneys (Primark) Hoodies.

Statement	TRUE	FALSE
If the cost of cotton used to make hoodies increases, the supply of hoodies is likely to decrease.	✓	
If Penneys installs faster sewing machines, the supply of hoodies is likely to increase.	✓	
If VAT on clothing is increased, the supply of hoodies is likely to increase.		✓
If factory workers go on strike, the supply of hoodies is likely to decrease.	✓	



Shifts in supply

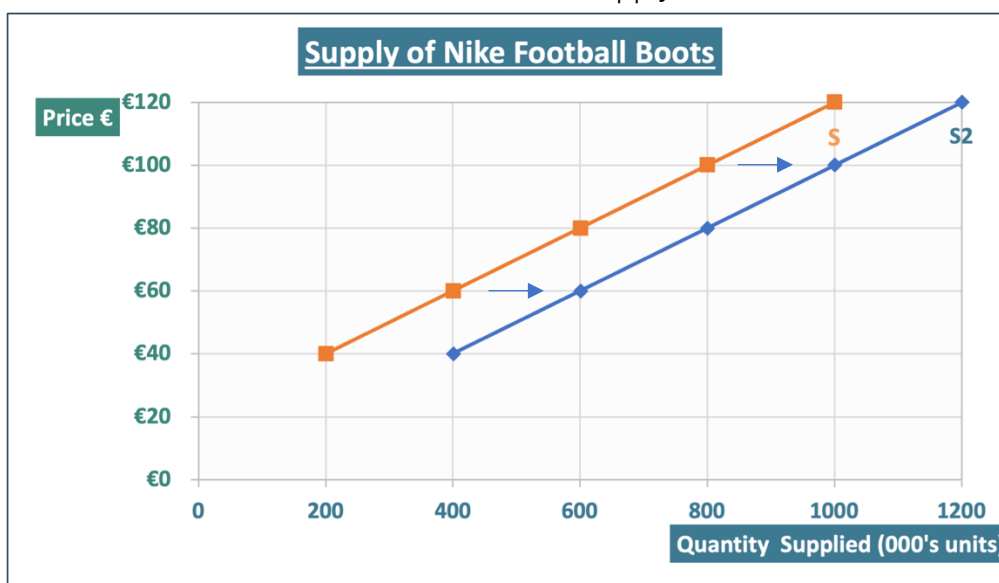
Q23 What impact would the following have on the supply of Nike Football Boots. Place a tick ✓ in the correct box

Statement	Rightward shift (increased supply)	Leftward shift (decreased supply)
A reduction in the VAT rate (tax) charged on football boots	✓	
A fall in the cost of leather and rubber used to manufacture Nike books	✓	
The opening of a new factory to produce Nike football boots	✓	
Delays caused by shipping problems		✓

Q24 As part of a new government initiative, the VAT on football boots has been reduced to 0% to try to help more people take up sport and get active. This has increased the quantity supplied of boots by 200,000 units at each price level.

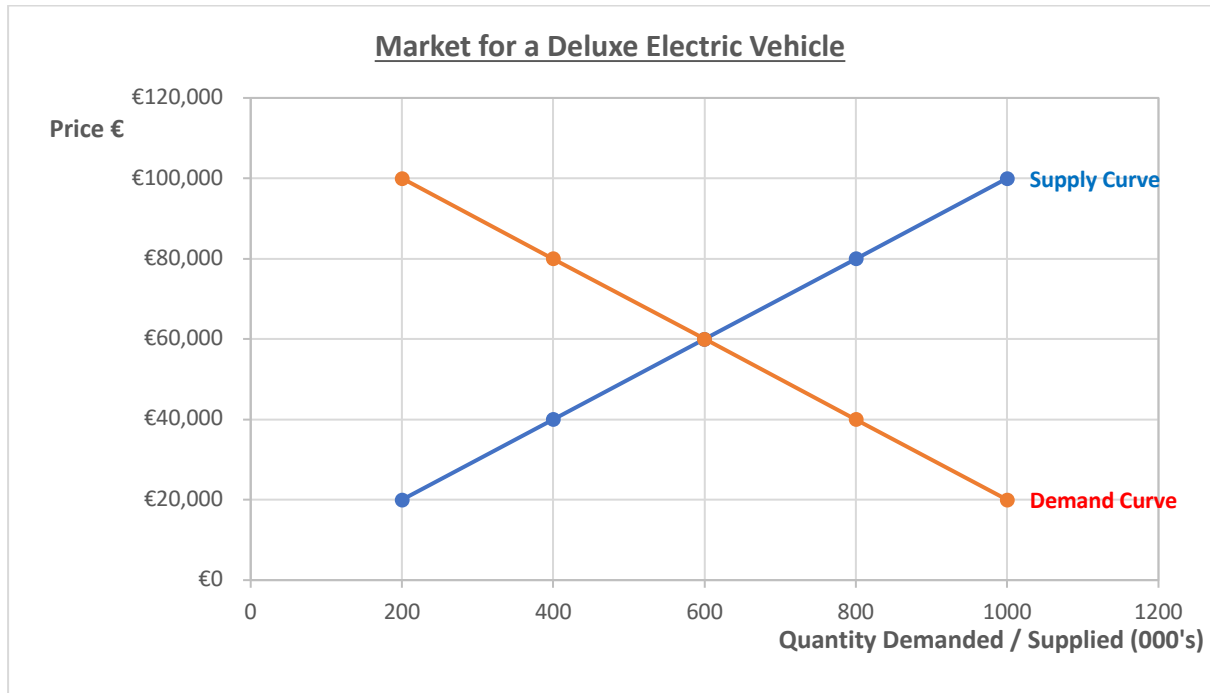
Supply of Nike Football Boots		
Price (€)	Quantity Supplied (units) 000s	NEW Quantity Supplied (units) 000s
€40	200	400
€60	400	600
€80	600	800
€100	800	1,000
€120	1,000	1,200

Use the data from the table above to draw the new supply curve for football boots.



Identifying Market Equilibrium

Q25 A new deluxe electric vehicle is launching on to the Irish market. The demand and supply curves for it are shown in the diagram below.



Use the above diagram to answer **each** of the following questions

Write your answers in the space provided

(i) Indicate the equilibrium quantity for Deluxe Electric Vehicles

600,000 units

(ii) Indicate the equilibrium price for Deluxe Electric Vehicles

€60,000

(iii) Indicate the quantity demanded when the price is €40,000

800,000 units

(iv) Indicate the price level when the quantity supplied for Deluxe Electrical Vehicles is 800,000 units

€80,000

Top Tip: In an exam, make sure to always give the unit of measurement for any number you write – so for the price, make sure to give the '€' sign and for the quantity, you should write 'units'.



Q26 The demand and supply curves for a new range of TV sets are shown in the diagram below. Answer the questions that follow.



Use the above diagram to answer **each** of the following questions
Write your answers in the space provided

(i) Indicate the equilibrium quantity for New TV sets

150,000 units

(ii) Indicate the equilibrium price for New TV sets

€400

(iii) Indicate the quantity demanded of New TV sets when the price is €200

250,000 units

(iv) Indicate the quantity supplied for New TV sets when the price is €500

200,000 units

(v) Indicate the price level when the quantity supplied for New TV sets is 100,000 units

€300



Drawing Market Equilibrium

Student Task: Use data from a table to plot a demand curve and supply curve

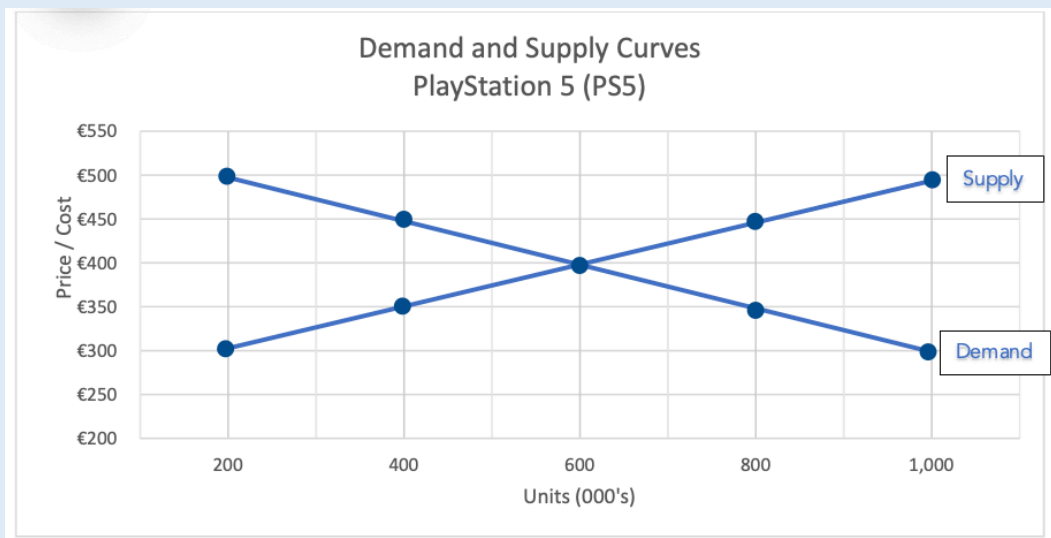
Students were given a table and had to answer the following questions:

(i) Use the information in the table below to draw the demand and supply curves for the PlayStation 5 (PS5)

Price	Quantity Demanded (000's units)	Quantity Supplied (000's units)
€300	1,000	200
€350	800	400
€400	600	600
€450	400	800
€500	200	1,000

Demand and Supply Curves
Playstation 5 (PS5)

SOLUTION



(ii) Use your diagram to identify the equilibrium price and equilibrium quantity.

Write your answers in the table below. (5m)

Equilibrium Price of the PS5	€400
Equilibrium Quantity of the PS5	600,000 units

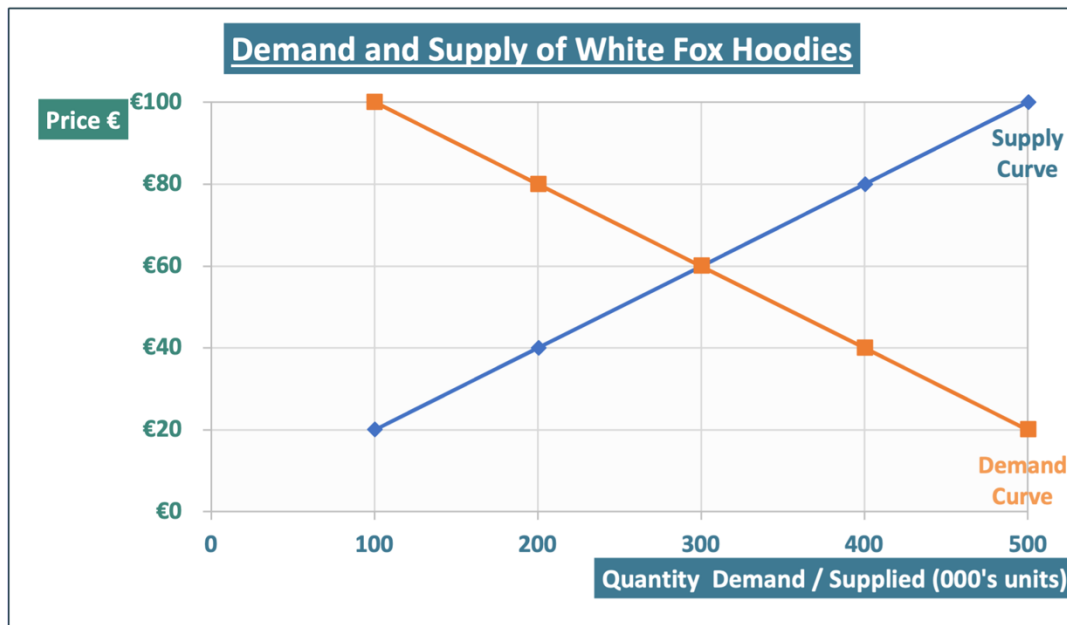
Top Tip! In an exam, make sure to always give the unit of measurement for any number you write – so for the price, make sure to give the '€' sign and for the quantity, you should write 'units', and pay extra attention to the units if they are displayed in thousands or millions (000's or "m") as you will need to write this for your answer.



Q27 (i) Ursula Quinn is in charge of ordering stock for a retail shop. As a buyer of stock, she needs to predict demand for different products in advance so that the shop has enough to satisfy the demand of their customers, and also not have too much that they will have lots of leftover stock unsold that they will have to put on sale to sell off.

Use the information in the table below to draw the demand and supply curves for White Fox hoodies for the retail shop.

Demand and Supply of White Fox Hoodies		
Price	Quantity Demanded (000's units)	Quantity Supplied (000's units)
€20	500	100
€40	400	200
€60	300	300
€80	200	400
€100	100	500



Q27 (ii) Use your diagram to identify the equilibrium price and equilibrium quantity. Write your answer in the boxes below:

Equilibrium price of the White Fox Hoodies	€60
Equilibrium quantity of the White Fox Hoodies	300,000 units

Q27 (iii) Explain the term 'complementary good' and give an example of a complementary good for White Fox Hoodies

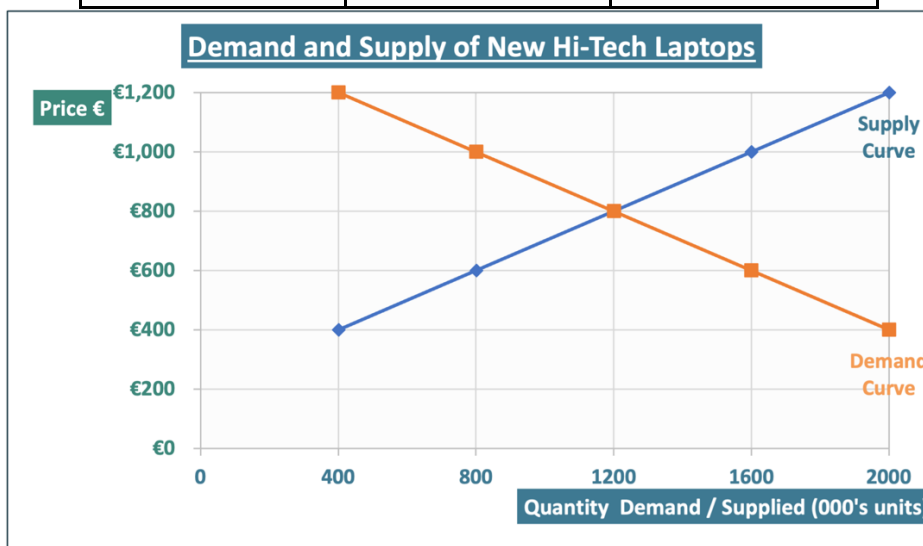
Explain: A good used together with another good (having one adds value to the other)

Example: A pair of matching White Fox tracksuit bottoms. They are often bought and worn together, so having one increases the value of having the other.



Q28 (i) Sophie Kelly manages stock for an electronics shop in a large shopping centre. One of the shop's most popular products is **New Hi-Tech Laptop**. To make sure there is enough stock to meet customer demand, and to avoid having too many unsold laptops left at the end of the term, Sophie analyses demand and supply before placing new orders. Use the information below to draw the demand and supply curves for new laptops.

Market for a New Hi-Tech Laptop		
Price	Quantity Demanded (units)	Quantity Supplied (units)
€400	2,000	400
€600	1,600	800
€800	1,200	1,200
€1,000	800	1,600
€1,200	400	2,000



Q28 (ii) Use your diagram to identify the equilibrium price and equilibrium quantity. Write your answer in the boxes below:

Equilibrium price of the New Hi-Tech Laptop	€800
Equilibrium quantity of the New Hi-Tech Laptop	1,200,000 units

Q28 (iii) Explain **two** factors that might **increase** the supply of the New Hi-Tech Laptop

Factor: Decrease in cost of production
Explanation: If the cost of components, labour, or electricity falls, it becomes cheaper for firms to produce laptops, so they are more willing and able to increase supply.
Factor: Improvement in technology
Explanation: If manufacturers introduce better machinery or automation, they can produce laptops more efficiently and in greater quantities, increasing supply.
Other: Higher prices, lower VAT, favorable unplanned factor



Changes in Market Prices

Top Tip: The market price changes when demand or supply changes in a market, remember:

Prices will increase if supply falls or demand rises as the good becomes more **scarce**
 Prices will decrease if supply rises or demand falls as the good is now more **plentiful**



EXAM CORNER

(iii) If there was a reduction in the supply of Apple iPhones, what impact would this have on the price of Apple iPhones? Give a reason for your answer. **(5m)**

Impact: Prices would **increase**

Reason: Due to the reduction in supply, prices will increase due to increased **scarcity/rarity/less goods available/demand being greater than supply.**

Q29 Read the event/scenario below and then the statement that follows and state whether it is TRUE or FALSE. Explain your choice.

Event / Scenario	Statement
1. Russia and Ukraine account for close to 20% of the world's cereal grain production. A bread, flour and wheat shortage arose because of Russia's invasion of Ukraine.	1. This would cause the market price for bread, flour and wheat to increase.
TRUE - Supply would decrease, causing a shortage/scarcity of wheat, which means the demand is now greater than the supply, increasing prices.	
2. The growth of AI (artificial intelligence) is allowing businesses to develop and supply software at a much greater speed and lower cost than ever before.	2. This would cause the market price for software to decrease.
TRUE – Costs would fall / new technology allows more supply, causing supply to be greater than demand (a surplus), causing prices to fall	
3. When the COVID-19 pandemic first broke out, there was a rush on for people to buy facemasks and PPE (personal protective equipment) before it all sold out.	3. This would have caused the market price for facemasks and PPE to decrease.
FALSE – Demand would increase sharply, causing a shortage, which means demand is greater than supply, leading to an increase in prices for the scarcer amount of face masks.	



Q30 Following a change in either demand or supply, the price of a good or service would be impacted.

Read the questions below and then state the impact it would have on prices, and then give a reason for your answer for each.

(i) If there was an **increase in demand** for All-Ireland Final tickets, what impact would this have on the price of tickets?

Impact: Prices would increase.

Reason: An increase in demand means more people want to buy tickets, so demand becomes greater than supply due to a scarcity, allowing sellers to charge higher prices.

(ii) If there was a **decrease in demand** for second-hand cars, what impact would this have on the price of second-hand cars?

Impact: Prices would decrease.

Reason: A decrease in demand means fewer people want to buy second-hand cars, so supply becomes greater than demand (a surplus), forcing sellers to lower prices.

(iii) If there was an **increase in supply** of fresh milk from Irish farms, what impact would this have on the price of milk?

Impact: Prices would decrease.

Reason: An increase in supply means more milk is available on the market, so supply becomes greater than demand (a surplus), putting downward pressure on prices.

(iv) If there was a **reduction in supply** of new houses in Dublin, what impact would this have on house prices?

Impact: Prices would increase.

Reason: A reduction in supply means fewer houses are available for the same amount of buyers, creating scarcity, so demand is greater than supply, leading to higher prices.



A market	A market is a place where buyers _____ goods or services and _____ supply goods or services .
Black Market	This is the market where _____ transactions take place that are not recorded by the government, so no _____ are paid on them. _____ consumer rights/protection; bad for legitimate businesses
Demand	This shows the quantity (units) of a good or service that consumers are willing and able to buy at different _____ levels.
Substitute Goods	Goods that are _____ / _____ for another good or service. E.g. _____ & Pepsi
Complementary Goods	Goods that _____ / _____. E.g. Phones and phone covers, Kindles and kindle books
Factors that increase demand	<ul style="list-style-type: none"> • A _____ in the price of the good • An _____ in the price of a substitute good • A _____ in the price of a complementary good • _____ household / disposable income • A good comes _____ fashion / has _____ advertising or marketing
Factors that reduce demand	<ul style="list-style-type: none"> • An _____ in the price of the good • A _____ in the price of a substitute good • An _____ in the price of a complementary good • _____ household / disposable income • A good _____ fashion / gets _____ publicity / doesn't _____.
Supply	This shows the quantity (units) of a good or service that sellers are willing and able to supply at different price levels.
Factors that increase supply	<ul style="list-style-type: none"> • An _____ in the price of the good • An _____ in the technology used to make the good • A _____ government action e.g. reducing VAT on the good or service • An unplanned factor increasing supply e.g. a _____ harvest • A _____ in the cost of production e.g. cheaper raw materials to make it
Factors that reduce supply	<ul style="list-style-type: none"> • A _____ in the price of the good • A _____ in the technology used to make the good • A _____ government action e.g. • An unplanned factor decreasing supply e.g. a _____ harvest • An _____ in the cost of production e.g. more _____ raw materials
Market Equilibrium	Market equilibrium is the _____ and _____ where the level of demand is equal to the level of _____ in a market.
What causes prices to increase	Price changes when demand or supply changes Prices will <u>increase</u> if _____ <u>falls</u> or _____ <u>rises</u> as the good is now _____.
What causes market prices to fall	Price changes when demand or supply changes Prices will <u>decrease</u> if _____ <u>rises</u> or _____ <u>falls</u> as the good is now _____.

