

Name	Date started	Target end date

WJEC GCSE Mathematics and Numeracy (Double Award) – Question Pack

Bread-and-butter Foundation finance: pounds vs pence conversions, best-buy comparisons by unit price, and accurate money arithmetic. Sourced from lega

REVISE
.wales

F1.01 – Money basics – pounds, pence & best buys

Spec 1.8.1, 1.8.2 – Unit 1 (calculator allowed)

Bread-and-butter Foundation finance: pounds vs pence conversions, best-buy comparisons by unit price, and accurate money arithmetic. Sourced from legacy WJEC GCSE Mathematics-Numeracy Foundation papers (3300U10/U20) and accessible content from Intermediate papers (3300U30/U40), organised for revision under the 2025 spec.

2025 SPECIFICATION

Estimated time for entire question pack: ~2 hours 56 minutes

Derived from the GCSE Higher pace of ~1.5 min/mark (117 marks across 38 questions).

*You are advised to **not** attempt to complete all of this in one sitting.*

ABOUT THIS QUESTION PACK

This is a **focused single-topic practice pack**, not a single mock paper. Questions are organised against the 2025 specification. Questions are ordered chronologically by sitting, with custom-written and SAM questions at the end.

INSTRUCTIONS

Use black ink or black ball-point pen. Show all working – method marks are awarded for clear setup.

A calculator is allowed on every question in this pack (Unit 1 is the calculator-allowed paper).

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Money basics – pounds, pence & best buys – what the new spec asks

WJEC GCSE Mathematics (first teaching 2025) · Unit 1: calculator-allowed.

Money arithmetic 1.8.1

- Convert between pence and pounds (1p = £0.01).
- All money answers in two decimal places when in £.
- Work in pence to avoid rounding errors when adding.

Best-buy comparisons 1.8.1

- Reduce each option to a unit price.
- Compare unit prices – cheapest per unit wins.
- Show working clearly: pence per gram is standard.

Real-life problems 1.8.2

- Read carefully – how many of each item?
- Set up an expression then evaluate.
- Final answer must make sense in context.

Exam strategy 1.8

- Show working – method marks count.
- Lay out columns when comparing options.
- Calculator allowed on Unit 1; check key presses.

Money basics – pounds, pence & best buys in one page

Quick-reference notes – revisit before each question. Don't use during the questions.

Pounds & pence

£1 = 100p. Always work in one unit – don't mix.

£ answers: **two decimal places** (£3.40, not £3.4).

Best buy

Reduce each option to *price per unit* (per gram, per ml, per item).

Smallest unit price wins – not smallest pack price.

E.g. 500 ml for 40p \Rightarrow 0.08p per ml.

Add & subtract money

line up the decimal points

$£2.40 + 85p = £2.40 + £0.85 = £3.25$.

Change

change = amount paid – total cost

Always check it makes sense (no negatives, no £0.005).

Splitting cost

n people share £X \Rightarrow each pays $£X \div n$.

Round up to the nearest penny when needed, not down.

Common traps

- Writing £3.4 instead of £3.40.
- Comparing pack price not unit price.
- Mixing pence and pounds mid-calculation.

Examiner
only

1. (a) Write the number fifty thousand and four in figures. [1]

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(b) Calculate £7.20 divided by 9.
Write your answer in pence. [2]

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Answer: pence

(c) Mair thought of two whole numbers.
When she multiplied them together, the answer was 20.
When she added them together, the answer was 9.
What are the two numbers that Mair thought of? [2]

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Numbers are and

3300U101
03



1. (a) One of the calculations below is incorrect.
Circle the incorrect calculation.

[1]

$$78 + 9952 = 10030$$

$$875 \div 35 = 25$$

$$3685 - 2852 = 833$$

$$452 \times 63 = 28466$$

$$89775 \div 45 = 1995$$

- (b) One of the numbers below is a multiple of 38.
Circle the multiple of 38.

[1]

2

19

338

388

3838

- (c) Computers cost £432 each.
How many can be bought with £9876?

[1]

Examiner
only3300U201
03

Examiner only

3. (a) Martina is going to buy some milk to make pancakes.



Small
500 ml for 40p



Medium
1200 ml for £1.20



Large
2000 ml for £2.50

Which size carton of milk offers the best value for money?
You must show all your working.

[3]

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(b) Martina's pancake recipe is as follows.

Pancake recipe - Makes 12 pancakes
100g flour
2 eggs
300ml milk

Calculate the quantity of milk needed to make 30 pancakes.

[2]

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Milk: ml



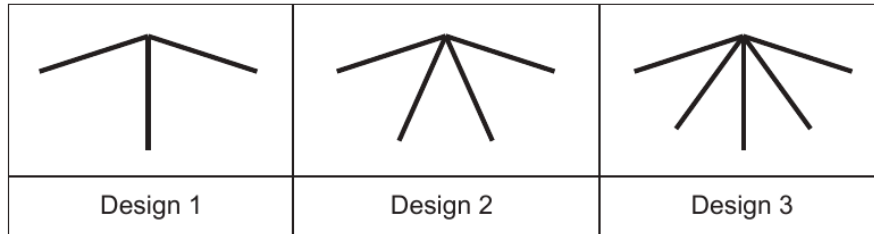
3310U301
07

Examiner only

4. A jewellery designer makes brooches.
Each brooch consists of a number of identical pieces of metal.

These brooches come in different designs.
These designs follow a simple pattern.

The first three designs are shown below.
Design 1 consists of 3 pieces of metal.



- (a) How many pieces of metal will be used to make the brooch in Design 5? [1]

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- (b) Which design uses 11 pieces of metal? [1]

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- (c) A customer says,

To find how many pieces of metal are used in every design, you multiply the design number by 3, because Design 1 has three pieces of metal.

Is the customer correct for every design?

Yes

No

Give a reason for your answer. [1]

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Examiner only

- (d) One customer decides to order a special brooch with a horizontal bar at the top. The designer knows two of the angles. These are shown in the diagram below.

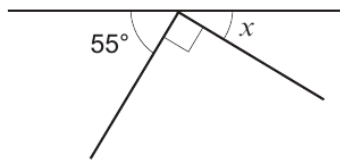


Diagram not drawn to scale

Calculate the size of angle x . [2]

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$x = \text{.....}^\circ$

- (e) The designer uses the following formula to calculate how much he will charge for a brooch.

$$\text{Charge for a brooch (in £)} = 2 \times \text{cost of materials} + 14$$

A customer spends £30 on a brooch for a friend.

Calculate the cost of the materials for this brooch. [2]

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Cost of materials is £

3310U101
09



Examiner
only

- (iii) There are two flowers that each have 19 leaves.
Calculate the difference in the heights of these two flowers.
You must show all your working. [2]

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Difference in the heights is cm

- (iv) Calculate the percentage of the flowers that have **fewer than 23 leaves**. [2]

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..... % of the flowers have **fewer than 23 leaves**.

5. (a) Malik has two orchards.
He has apple trees and pear trees in his north orchard.
He has pear trees and cherry trees in his west orchard.



- In the north orchard,
• Malik has a total of 35 trees
• number of apple trees : number of pear trees = 4 : 3.

- In the west orchard,
• Malik has twice as many **pear** trees as he has **pear** trees in the north orchard
• number of pear trees : number of cherry trees = 5 : 11.

How many **cherry** trees does Malik have?
You must show all your working. [5]

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Examiner
only

- (b) Malik's crop of apples this year has a total mass of 5280 pounds.
He makes apple juice from $\frac{1}{6}$ of the mass of his apple crop.
Malik makes 2 litres of apple juice from every 5 kg of apples.

Calculate the number of litres of apple juice Malik makes.

[6]

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Examiner only

(c) Malik makes cherry jam using some of the fruit from his trees.



(i) He makes and sells 200 jars of cherry jam.

It costs him £94 for all the ingredients to make the jam.
Malik pays 23p for each jam jar he uses.
He sells each jar of jam for £1.60.

Calculate the profit Malik makes from selling his 200 jars of jam. [5]

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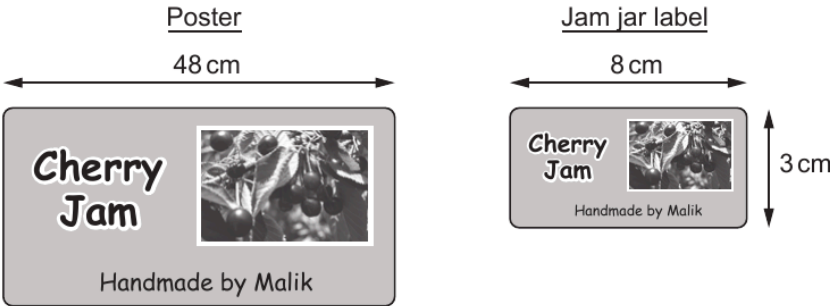
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(ii) Malik makes a poster to advertise his jam.
He also makes labels for the jars.
The poster and the labels are mathematically similar.



Diagrams not drawn to scale

Calculate the height of the poster. [2]

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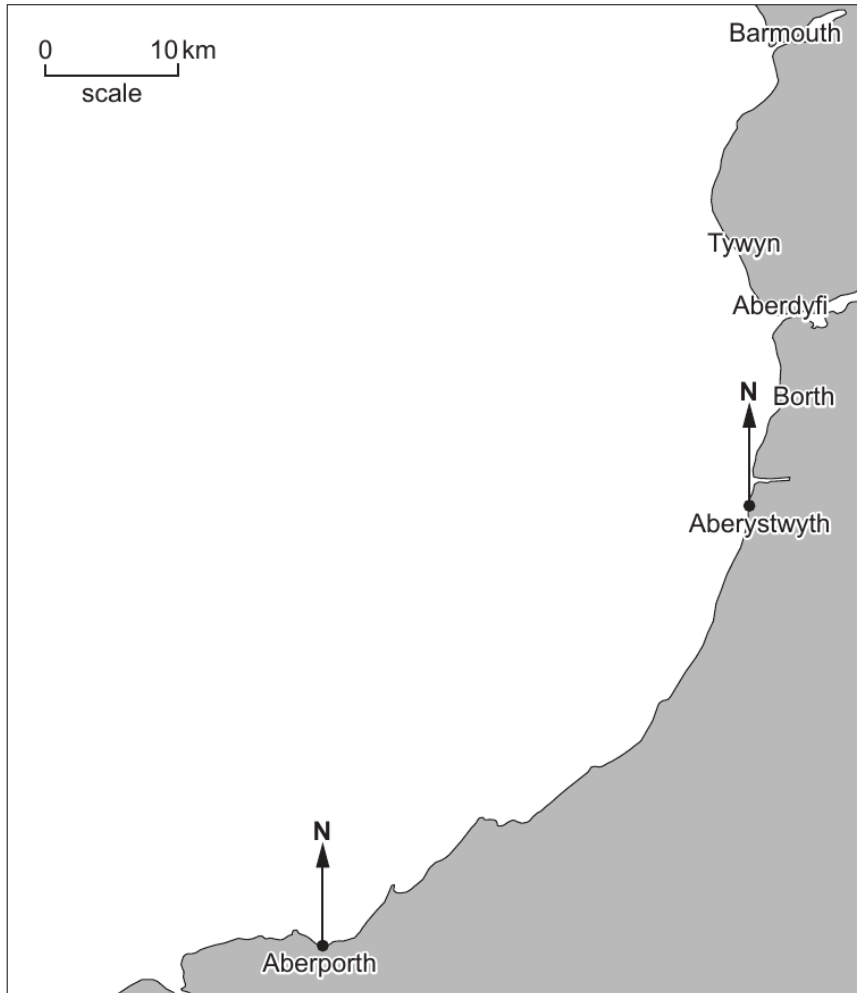


Examiner only

6. Whales are sometimes spotted in the Irish Sea, off the west coast of Wales.

A minke whale was spotted on a bearing of:

- 010° from Aberporth
- 280° from Aberystwyth.



(a) Scientists decide to search for other whales in the Irish Sea. The search area is the region within 20 km of the position where the minke whale was spotted.

Using the scale given, show this search area on the map above.

[4]

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Examiner
only

(b) This minke whale has a length of 20 feet.

Remember: 1 inch \approx 2.5 cm, 1 foot = 12 inches

Use these facts to complete the following statement. [3]

The minke whale has a length of metres.

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(c) The brain of a minke whale has 12.8 billion neocortical neurons.
A female human brain has 19 billion neocortical neurons.

Remember: 1 billion = 1000 million

(i) Calculate an **estimate** for the number of neurons in a minke whale brain expressed as a percentage of the number of neurons in a female human brain. You must show all your working. [2]

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Approximately %

(ii) 10% of all neocortical neurons are lost over a human lifespan. Calculate the number of neocortical neurons in a female human brain at the end of a lifespan. Give your answer in standard form. [4]

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Examiner
only

7. Rosie is printing two different rectangular pictures of her dog.
The small picture has a height of 10 cm and a width of 5 cm.
The large picture has a height of 40 cm and a width of 15 cm.



Pictures not to scale

- (a) The small picture costs £2 to print.
Each 1 cm² of the small picture costs the same to print as each 1 cm² of the large picture.

Calculate the cost of printing the large picture.
You must show all your working.

[6]

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Examiner
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- (b) To make a frame, it costs 40p for each centimetre of the total distance around the outside of the picture.



Diagram not drawn to scale

Calculate the cost of making a frame for the **small** picture.

[3]

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Cost of making a frame for the **small** picture is



Examiner
only

7. (a) 10 years ago, Matteo bought a car for £4500.
His car depreciated in value by 20% in the **first** year.
In each of the following years, his car depreciated by 14% of
its previous year's value.



Show that the value of Matteo's car is now less than £950.

You must show all your working.

[3]

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- (b) Matteo's car insurance has increased by 25% from the amount he paid last year.
His car insurance is £750 this year.

Calculate the amount Matteo paid for his car insurance last year.

[2]

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Matteo paid £ for his car insurance last year.



Examiner
only

(c) The diagram below shows the front of Matteo's garage.

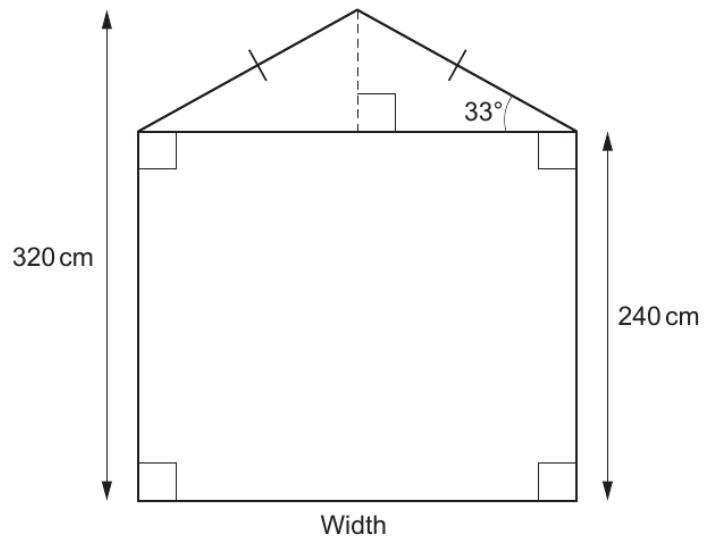


Diagram not drawn to scale

Calculate the width of Matteo's garage.

[5]

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Examiner
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- (d) The length of Matteo's car is 400 cm, correct to the **nearest 10 cm**.
The length of his garage is 550 cm, correct to the **nearest 10 cm**.

When Matteo parks his car, he leaves exactly 70 cm between the car and the back wall of the garage.

Calculate the maximum length of the space between Matteo's car and the garage door. [3]

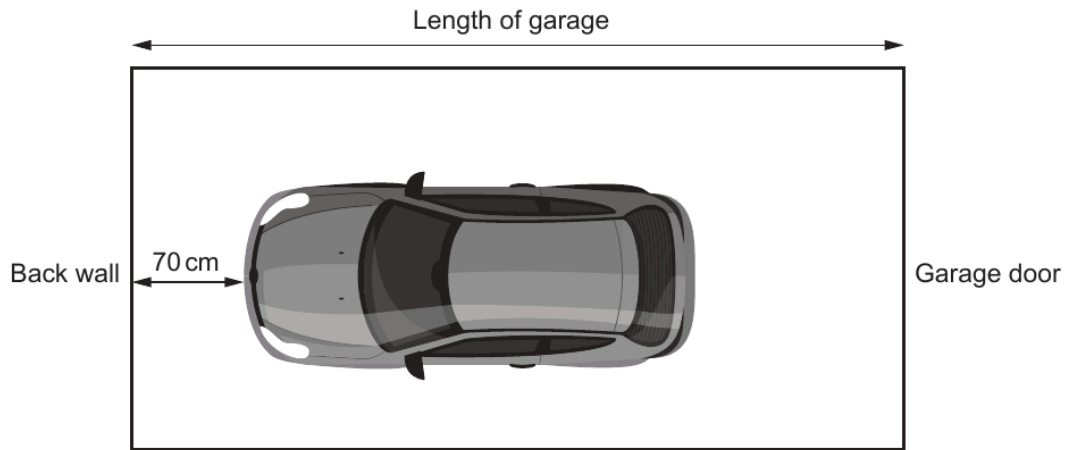


Diagram not drawn to scale

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Examiner
only

8. Martina is going to buy some milk to make pancakes.



Small
500 ml for 40p



Medium
1200 ml for £1.20



Large
2000 ml for £2.50

Which size carton of milk offers the best value for money?
You must show all your working.

[3]

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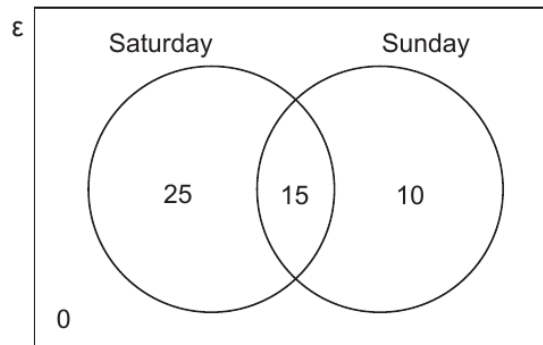


Examiner
only

1. Delyth buys 50 tickets for a group of friends to go to a music festival.
The ticket prices are given below.

Ticket for	Ticket price per person
Saturday only	£20
Sunday only	£17
Both days	£28

The Venn diagram below shows the number of tickets that Delyth buys.



- (a) What fraction of the group has tickets for both days?
Give your answer in its simplest form. [2]

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- (b) Calculate the total cost of the 50 tickets.
You must show all your working. [4]

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Total cost of the 50 tickets is £



4. (a) Maggie sees a Bluetooth speaker in a sale.

The price of the speaker is reduced by 18% in the sale.
The original price of the speaker was £45.



Maggie's mum says she will share the cost of buying this speaker.
The ratio of the amount Maggie's mum pays to the amount Maggie pays is 8 : 1.

Calculate the amount Maggie's mum will pay towards buying this speaker in the sale.
You must show all your working. [4]

Examiner
only

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Examiner
only

- (b) The diagram below shows a flowerbed at Maggie's house.
Maggie's mum will pay her £2.50 per m^2 to weed the flowerbed.

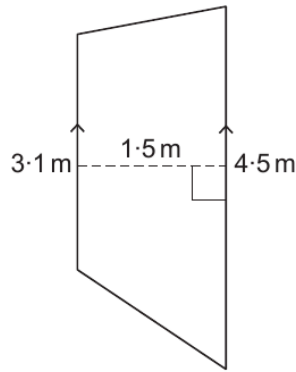


Diagram not drawn to scale

Calculate how much Maggie will get paid for the weeding.

[4]

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Examiner
only

5. The map below shows part of South West Wales.



(a) Find the bearing of St Brides from Fishguard. [1]

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(b) The distance by road from Haverfordwest to Milford Haven is 12 km.

(i) Estimate the distance by road from Haverfordwest to Fishguard. [1]

..... km



Examiner
only

- (ii) Owain has a **different** map that has a scale of 1 : 25 000.

Owain measures the distance by road from Haverfordwest to Milford Haven on his map.

Complete Owain's statement below.

"On my map, the distance by road from Haverfordwest to Milford Haven is represented by a length of cm." [3]

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11



Examiner
only

7. Jac is planning to visit the Empire State Building in New York.

- (a) According to the internet, the Empire State Building has a total of 1172 miles of elevator cable.

Complete the following statement.

[2]

There is a total of **km** of elevator cable in the Empire State Building.



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- (b) The elevators in the Empire State Building were designed to move at a rate of 0.366 kilometres per minute.

Complete the following statement.

[2]

The elevators in the Empire State Building were designed to move at **metres per second**.

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- (c) Planners had an original budget of \$60 million to construct the Empire State Building. It actually cost \$41 000 000 to construct.

Complete the following statement.

Give your answer correct to 2 decimal places.

[3]

Constructing the Empire State Building cost % less than the original budget.

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Examiner
only

- (d) More than 4 million people visit the Empire State Building each year.
What is 4 million written in standard form?
Circle your answer.

[1]

4×10^{-5} 0.4×10^5 4×10^5 4×10^6 4×10^7

- (e) The conversion rate at the exchange shop is £1 = \$1.25.
The exchange shop only has \$10 notes and \$50 notes.
- Jac has exactly £350.
He wants to exchange as close to £350 as possible for US dollars (\$).
He asks for as **few** notes as possible.

Calculate:

- how many \$10 notes and how many \$50 notes Jac gets
- how much he pays for his currency.

You must show all your working.

[6]



9. Giovanni has a takeaway pizza van. He sells whole pizzas and slices of pizza from his van.



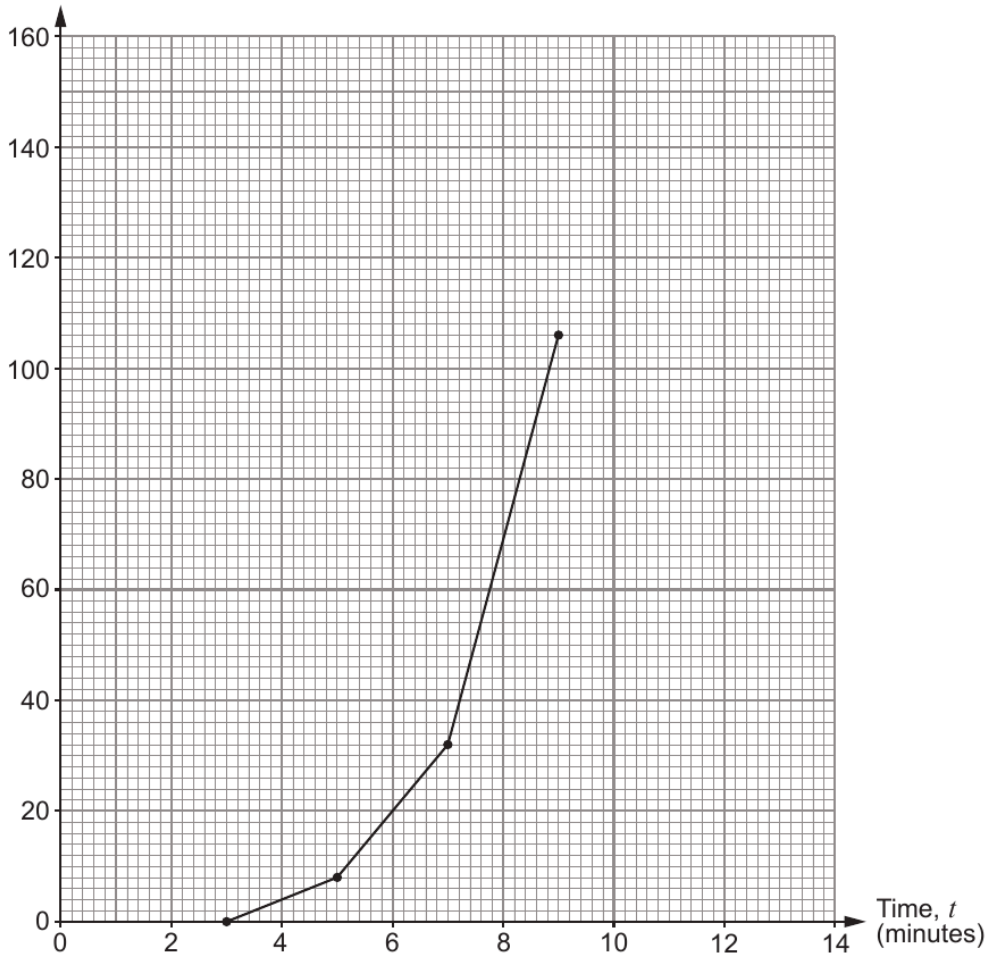
Examiner only

(a) For the last 3 days, he has timed how long it takes to complete the food order for each of his customers. Giovanni recorded his results in the table below.

(i) Complete the cumulative frequency table **and** the cumulative frequency diagram. [2]

Time, t (minutes)	Frequency	Cumulative frequency
$3 < t \leq 5$	8	8
$5 < t \leq 7$	24	32
$7 < t \leq 9$	74	106
$9 < t \leq 11$	40
$11 < t \leq 13$	14

Cumulative frequency



Examiner only

Use your cumulative frequency diagram to give the best estimates for the answers to each of the following questions.

- (ii) Find the median time taken to complete a food order. [1]

The median time is minutes.

- (iii) Giovanni is concerned that food orders are taking too long to complete. He says,

"Only 25% of the food orders are completed in under minutes."

Use **one** of the five values below to complete Giovanni's statement. [1]

6.4 6.6 7.2 8 9.6

- (iv) Calculate the percentage of orders that were completed in less than 6 minutes. [2]

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- (b) For the last 3 days:
 - Giovanni spent £180 on ingredients
 - he spent £220 on the running costs for the pizza van
 - he received a total of £700 from the food orders.

Calculate Giovanni's percentage profit. [3]

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- (c) Next year Giovanni intends to charge £8.40 for a basic pizza. This is an increase of 20% from the current charge.

Calculate how much Giovanni currently charges for a basic pizza. [2]



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9. (a) Maggie sees a Bluetooth speaker in a sale.

The price of the speaker is reduced by 18% in the sale.
The original price of the speaker was £45.



Maggie's mum says she will share the cost of buying this speaker.
The ratio of the amount Maggie's mum pays to the amount Maggie pays is 8 : 1.

Calculate the amount Maggie's mum will pay towards buying this speaker in the sale.
You must show all your working.

[4]

Examiner
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Examiner
only

- (b) The diagram below shows a flowerbed at Maggie's house. Maggie's mum will pay her £2.50 per m^2 to weed the flowerbed.

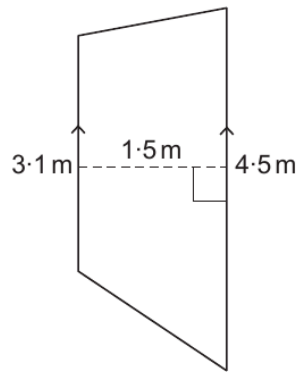


Diagram not drawn to scale

Calculate how much Maggie will get paid for the weeding.

[4]

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Examiner only

10. The table below shows the percentages of different amounts. Three values have been calculated.

Complete the table.

[4]

		Amount	
		£36	£
..... %		£3.60	£9.20
13.5%		£	£12.42

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Examiner
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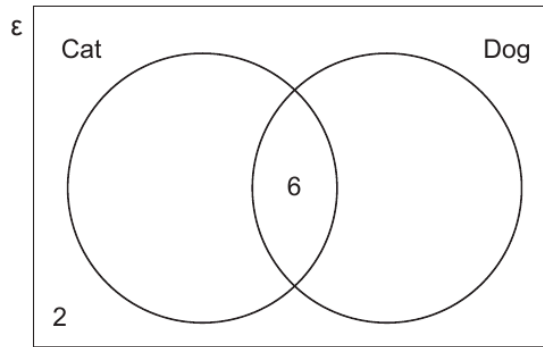
13. In a group of 40 people, some own a cat, some own a dog, and some own both a cat and a dog.
2 people in the group do not own a cat or a dog.

A person is chosen at random from the group.

The probability that the person owns a dog is $\frac{3}{5}$.

Complete the Venn diagram.

[3]



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Examiner only

19. The table below shows the percentages of different amounts. Three values have been calculated.

Complete the table.

[4]

		Amount	
		£36	£
..... %		£3.60	£9.20
13.5%		£	£12.42

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Examiner
only

1. Morgan wants to buy the following items from a shop.



Cereal	£2.70
Bananas	99p
Milk	£1.30
Eggs	£1.95
Coffee	£7.49

(a) Morgan uses a calculator to find the total cost of the items.

He thinks the total is £112.44.
What mistake has Morgan made?

[1]

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(b) Morgan pays for all the items with a £20 note.
How much change will he get?

[2]

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3310U201
03



Examiner
only

4. (a) Identical toothbrushes are sold in packs of 3 or 5.

A pack of 3 toothbrushes costs £1.44.
A pack of 5 toothbrushes costs £2.25.



Which pack of toothbrushes offers better value for money?
You must show all your working.

[3]

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(b) 75 ml tubes of toothpaste cost 93p each.

100 ml tubes of toothpaste offer the **same** value for money.



Calculate the cost of a 100 ml tube of toothpaste.

[3]

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Examiner
only

5. (a) Siôn has an ice cream van.

On Monday, Siôn sold three times as many ice creams as cold drinks.
He sold 50 cold drinks on Monday.
Siôn sells ice creams for £1.80 each.



Calculate the amount of money Siôn took from selling ice creams on Monday. [4]

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(b) Siôn keeps ice cream in a freezer in his van.
Every hour he checks the temperature in his freezer.
He turns on his freezer at 8 a.m.
The readings he takes from 8 a.m. to 3 p.m. are listed below.

10°C 2°C -5°C -12°C -12°C -12°C -13°C -14°C

(i) Calculate the mean of these temperatures. [3]

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(ii) At 4 p.m. the temperature in Siôn's freezer was recorded as -16°C.
Calculate the mean of the temperatures recorded in Siôn's freezer from 8 a.m. to 4 p.m. [2]

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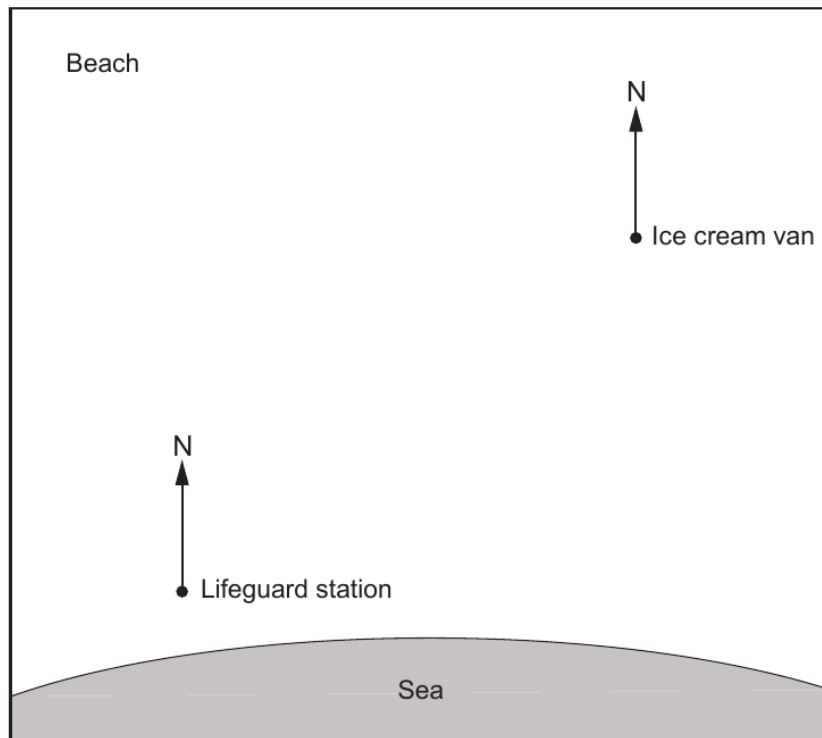
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Examiner only

(c) Siôn parks his ice cream van on the beach, as shown on the map below.

Scale: 1 cm represents 20 metres



(i) How far is Siôn's ice cream van from the lifeguard station? [2]

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..... metres

(ii) Complete the following statement.

'The bearing of the lifeguard station from Siôn's ice cream van
is°'

[1]

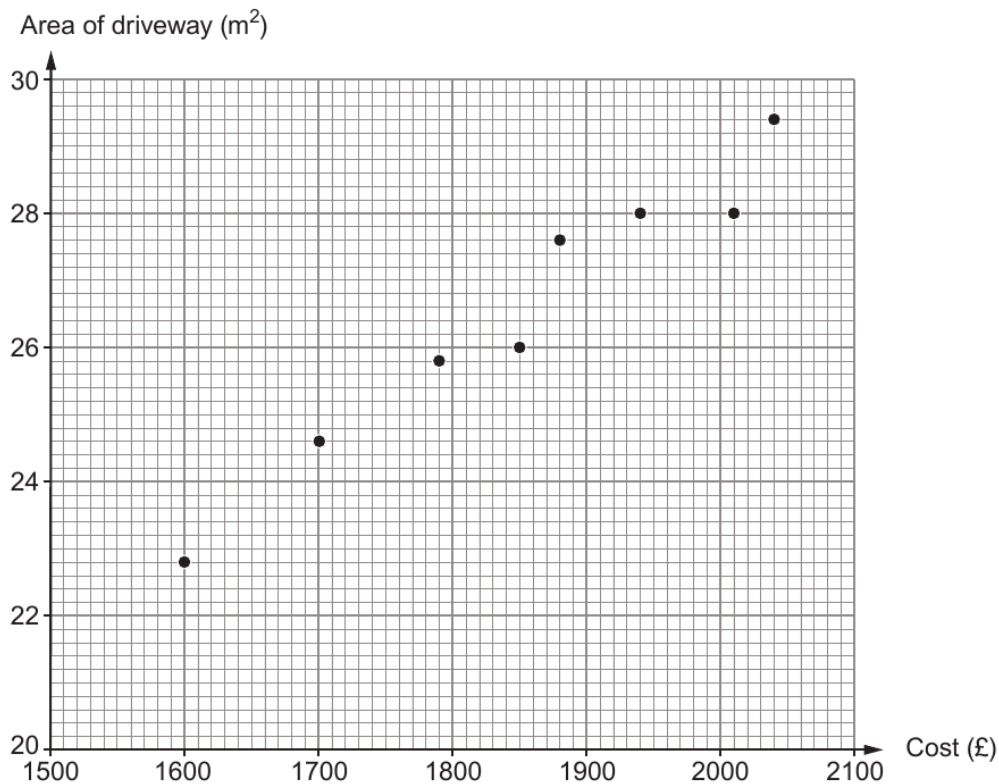
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3310U301
09



Examiner only

6. Some houses in a village have new driveways laid by DriveDown. The scatter diagram shows the area and cost of each driveway.



- (a) (i) Two of these houses have the same area of driveway. Calculate the difference in the cost of the new driveway for these two houses. [2]

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- (ii) Another house in the village has a driveway of area 25 m². Estimate the cost of having a new driveway laid by DriveDown for this house. [1]

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Examiner
only

(b) The measurements of Gwenda's driveway are shown below.

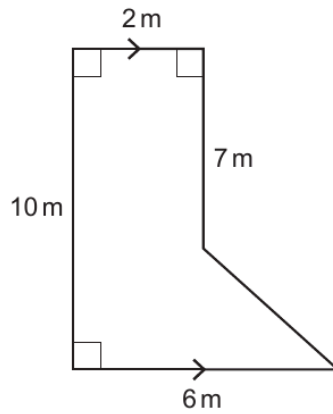


Diagram not drawn to scale

Consider the exact area of Gwenda's driveway.
Calculate an estimate of how much it would cost Gwenda to have a new driveway laid by DriveDown.
You must show all your working. [4]

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Examiner
only

- (c) Tanya's driveway covers an area of 23 m^2 .
She decides to have her driveway repaired instead of having a new driveway.

Tanya thinks the repair will cost her 40% of the estimated cost of having a new driveway laid by DriveDown.

She has budgeted £575 for the repair of her driveway.

Will Tanya's budget cover the cost of repairing her driveway?

Yes No

You must show all your working and give a reason for your answer.

[2]

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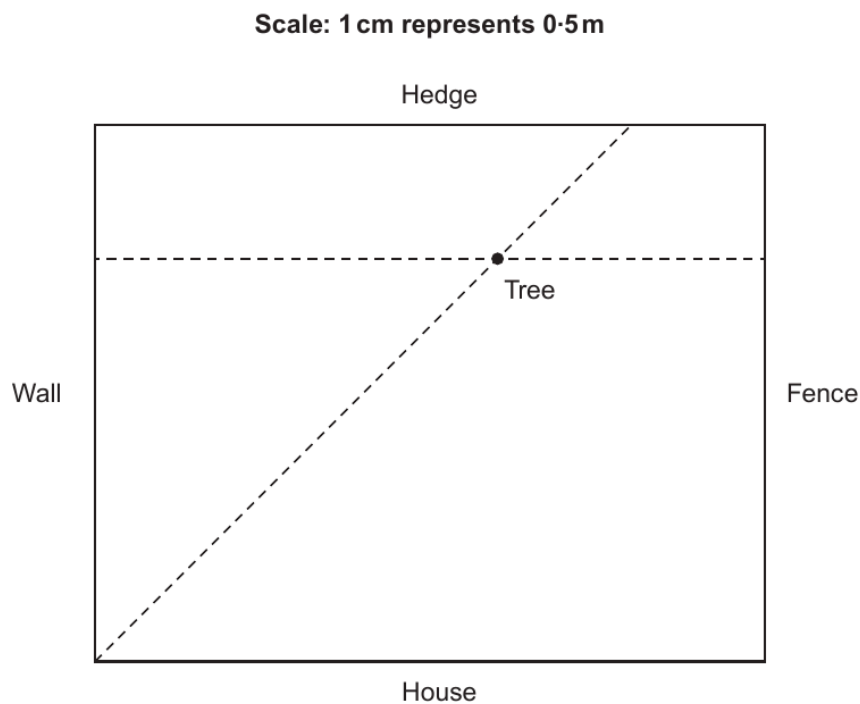
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Examiner only

7. (a) Josif produces a scale drawing to show where he wants a tree planted in his garden.



He writes out instructions to show where the tree is to be planted.

Which **two** of the following instructions describe where the tree is to be planted?

- A. The tree must be 2 m from the hedge.
- B. The tree must be 1 m from the hedge.
- C. The tree must be 6 m from the hedge.
- D. The tree must be 3 m from the hedge.
- E. The tree must be 1 m from the wall.

- F. The tree must be equidistant from the hedge and the fence.
- G. The tree must be equidistant from the hedge and the wall.
- H. The tree must be equidistant from the wall and the house.
- I. The tree must be equidistant from the hedge and the house.
- J. The tree must be equidistant from the wall and the fence.

[2]

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The two instructions are and



Examiner
only

- (b) A garden centre buys trees from a grower for £30 each.
The garden centre sells the trees for £42 each.



- (i) Calculate the percentage profit the garden centre makes from buying and selling one tree. [2]

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- (ii) The garden centre buys 10 of these trees to sell.
One of the trees gets damaged and cannot be sold.
The other 9 trees are sold.
Calculate the overall percentage profit or loss the garden centre makes from selling these trees.
You must state whether your answer is a profit or a loss.
You must show all your working. [4]

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- (iii) Of the 10 trees bought by the garden centre, what is the minimum number that need to be sold to ensure that the garden centre makes a profit?
Circle your answer. [1]

5 6 7 8 9

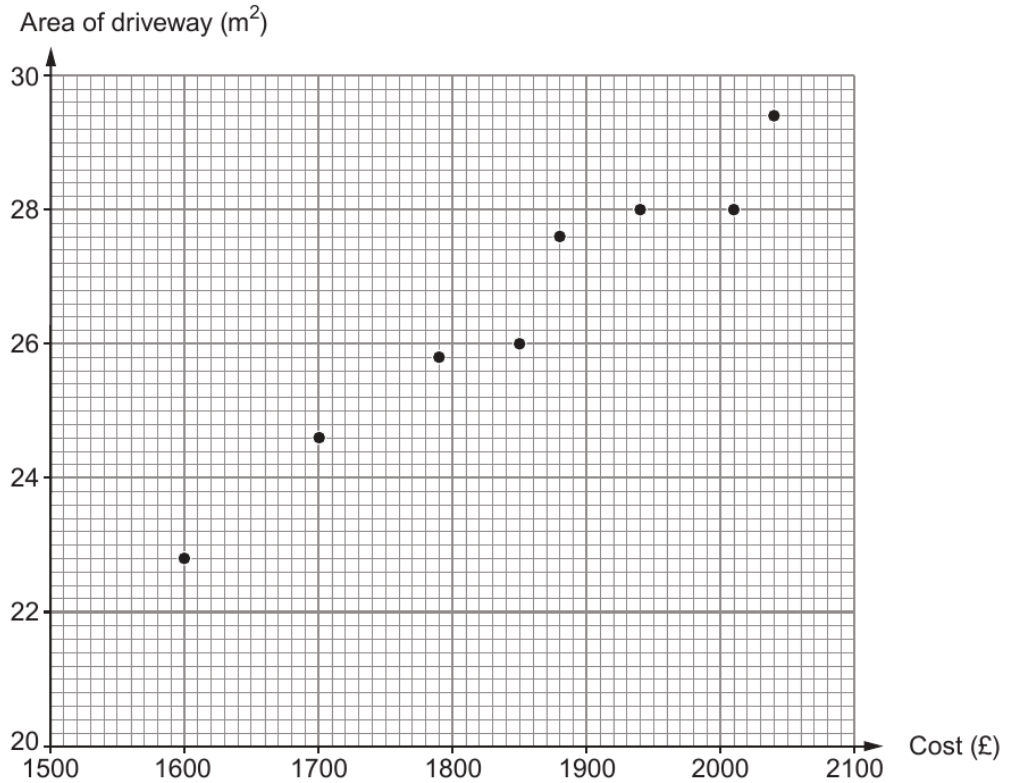
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Examiner only

8. Some houses in a village have new driveways laid by DriveDown. The scatter diagram shows the area and cost of each driveway.



- (a) Two of these houses have the same area of driveway. Calculate the difference in the cost of the new driveway for these two houses. [2]

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- (b) Another house in the village has a driveway of area 25 m². Estimate the cost of having a new driveway laid by DriveDown for this house. [1]

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Examiner
only

20. Aled and Berwyn share $\pounds x$ in the ratio 2 : 3.

- (a) Aled's share of the money is $\pounds 0.4x$.
What is Berwyn's share of the money in terms of x ?

[1]

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- (b) Carys and Delyth share the same amount, $\pounds x$, in the ratio 3 : 7.

Show that one of these four people receives the same amount as the combined total of two of the other people. [3]

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END OF PAPER



Examiner only

2. Kiera goes to the cinema with her friend.

(a) *In this part of the question, you will be assessed on the quality of your organisation, communication and accuracy in writing.*

A ticket bought **at the cinema** costs £4.50.

Kiera decides to buy the 2 tickets **online in advance**.

When she buys the tickets online:

- she is given 10% off the cost of each ticket
- she has to pay a total booking fee of £1.40.

How much does Kiera pay in total for the 2 tickets?

[4 + 2 OCW]



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3310U101
07

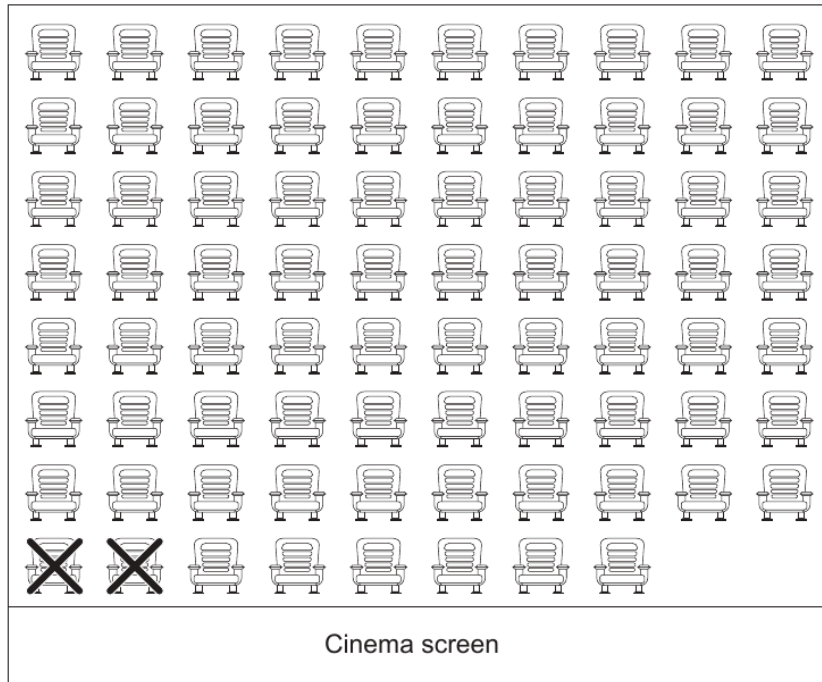


Examiner
only

- (b) The position of each seat in the cinema is given by a code, for example, seat E5.
 Each row of seats is labelled with a letter, A, B, C, D, E, F, G and H.
 Each row starts with seat number 1.
 Seats A1 and A2 have already been booked.
 This is shown by the crosses on the diagram.

Kiera books seats G9 and G10 for herself and her friend.
 Draw a cross on each of these 2 seats on the diagram below.

[1]



Examiner only

(c) When Kiera arrives at the cinema, she sees the following prices advertised.

Drinks		Snacks	
Small soft drink	£2.99	Regular popcorn	£4.95
Regular soft drink	£3.29	Large popcorn	£5.45
Large soft drink	£3.59	Nachos	£6.00
		Hot dog	£5.60

Combos			
Classic Combo: (regular soft drink & regular popcorn)	£6.99	Deluxe Combo: (large soft drink & large popcorn)	£7.60

Kiera decides to buy the Deluxe Combo.
How much will Kiera save by buying the Deluxe Combo instead of buying a large soft drink and a large popcorn separately? [4]

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3310U101
09



Examiner only

3. (a) Charlton Garden Centre sells plant pots and saucers.



At the garden centre, Enid buys twice as many plant pots as she does saucers.
The cost of a plant pot is 40p.
The cost of a saucer is 25p.
She spends £10.50 buying these plant pots and saucers.

Calculate how much Enid spends on buying the **saucers**.
You must show all your working.

[3]

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Enid spends £ buying the **saucers**

(b) Charlton Garden Centre sells packets of wild flower seeds.



Bee Flower Mix
1 g packet of seeds
£2.49



Cornfield Flower Mix
5 g packet of seeds
£15



Butterfly Flower Mix
3 g packet of seeds
£7.20

Which of the three different packets of seeds is the best value for money?

Bee Flower Mix

Cornfield Flower Mix

Butterfly Flower Mix

You must show all your working.

[4]

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Examiner only

- (c) (i) *In this part of the question, you will be assessed on the quality of your organisation, communication and accuracy in writing.*



Gareth buys packets of Cosmos flower seeds to sow in a part of his garden.
The diagram below shows this part of his garden.

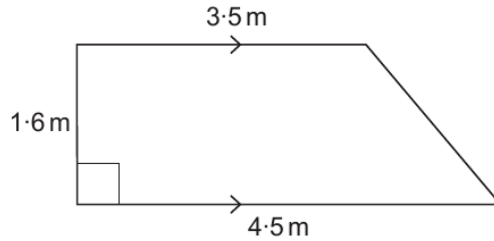


Diagram not drawn to scale

A 2.5 g packet of Cosmos seeds costs £8.20.
Gareth needs 1 gram of Cosmos seeds to sow an area of 1 m².

Calculate how much it costs Gareth to buy the packets of Cosmos seeds he needs to sow this part of the garden.
You must show all your working.

[5 + 2 OCW]

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- (ii) There are 105 Cosmos seeds in each gram.
How many seeds are there in 10 kg?
Circle your answer. [1]

1050 10 500 105 000 1 050 000 10 500 000

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3310U301
07

5. Maria makes and sells individual portions of salad.



Examiner
only

- (a) The tomatoes Maria needs to make 5 portions of salad cost her £1.75. Calculate the cost of the tomatoes she needs to make 40 portions of this salad.

[3]

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- (b) Maria makes a salad dressing from oil and vinegar. She uses oil and vinegar in the ratio 3 : 1. Maria makes 280 ml of salad dressing. Calculate the quantity of oil and the quantity of vinegar in the salad dressing.

[3]

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Oil ml

Vinegar ml

- (c) It costs Maria £24 to make 40 portions of salad. She sells all these portions of salad for 90p each. Calculate the **percentage** profit that Maria makes.

[4]

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Examiner only

6. (a) Charlton Garden Centre sells plant pots and saucers.



At the garden centre, Enid buys twice as many plant pots as she does saucers.
The cost of a plant pot is 40p.
The cost of a saucer is 25p.
She spends £10.50 buying these plant pots and saucers.

Calculate how much Enid spends on buying the **saucers**.
You must show all your working.

[3]

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Enid spends £ buying the **saucers**

(b) Charlton Garden Centre sells packets of wild flower seeds.



Bee Flower Mix
1 g packet of seeds
£2.49



Cornfield Flower Mix
5 g packet of seeds
£15



Butterfly Flower Mix
3 g packet of seeds
£7.20

Which of the three different packets of seeds is the best value for money?

Bee Flower Mix

Cornfield Flower Mix

Butterfly Flower Mix

You must show all your working.

[4]

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Examiner
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- (c) Gareth buys packets of Cosmos flower seeds to sow in a part of his garden. The diagram below shows this part of his garden.

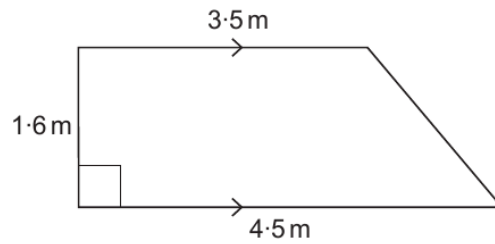


Diagram not drawn to scale

A 2.5 g packet of Cosmos seeds costs £8.20.
Gareth needs 1 gram of Cosmos seeds to sow an area of 1 m^2 .

Calculate how much it costs Gareth to buy the packets of Cosmos seeds he needs to sow this part of the garden.
You must show all your working. [5]

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Examiner
only

10. (a) Delia invests £4000 in an account that pays 3% compound interest per annum. She does not withdraw money or make any other payments into her account.

How much will Delia have in her account after **two years**?

[3]

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Amount in Delia's account after two years £

- (b) Delia bought a gold bracelet at a car boot sale a few years ago.

- (i) Delia's bracelet has increased in value by 40%.
Her gold bracelet is now worth £42.

Calculate how much Delia paid for the bracelet in the car boot sale.

[2]

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Delia paid £



- (ii) The density of the gold in Delia's bracelet is 20 g/cm^3 .
The bracelet has a mass of 6×10^{-3} **kilograms**.

Calculate the volume of Delia's bracelet.
Give your answer in cm^3 .

[3]

Examiner
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11. Steffan uses 654 kWh of electricity in a three-month period.

Electricity costs £0.30 per kWh.
The standing charge for the three-month period is £54.
Steffan has to pay VAT at 5% on the **total** cost.

Calculate Steffan's electricity bill.
You must show all your working.

[5]

Examiner
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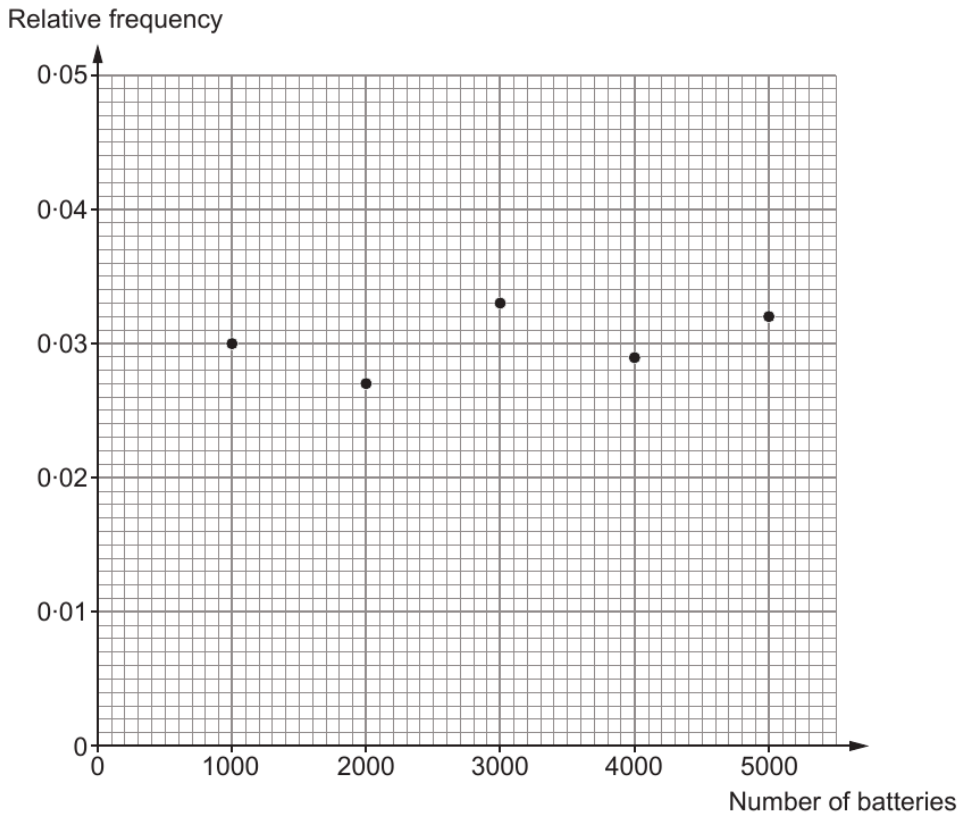
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END OF PAPER



Examiner only

16. PowrUp is a company that makes batteries. The quality of the batteries is tested regularly. PowrUp calculates the relative frequency of faulty batteries after checking a total of 1000, 2000, 3000, 4000 and 5000 batteries. The results are plotted on the graph below.



- (a) One battery is selected at random. Write down the best estimate for the probability that this battery will be faulty. You must give a reason for your choice. [2]

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Probability =

Reason:

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(b) It costs the company 2.6p to dispose of each of the faulty batteries.
How much will it cost the company to dispose of all the faulty batteries after testing the first 3000 batteries?
You must show all your working. [3]

Examiner
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