AQA

Please write clearly in block capitals.

Centre number | | | | | | Candidate number | | | | |

Surname _____

Forename(s) _____

Candidate signature _____

I declare this is my own work.

GCSE MATHEMATICS

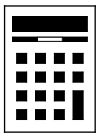
F

Foundation Tier Paper 2 Calculator

Friday 7 November 2025 Morning Time allowed: 1 hour 30 minutes

Materials

For this paper you must have:



- a calculator
- mathematical instruments
- the Formulae Sheet (enclosed).

Instructions

- Use black ink or black ball-point pen. Draw diagrams in pencil.
- Fill in the boxes at the top of this page.
- Answer **all** questions.
- You must answer the questions in the spaces provided. Do not write outside the box around each page or on blank pages.
- If you need extra space for your answer(s), use the lined pages at the end of this book. Write the question number against your answer(s).
- Do all rough work in this book. Cross through any work you do not want to be marked.

Information

- The marks for questions are shown in brackets.
- The maximum mark for this paper is 80.
- You may ask for more answer paper, graph paper and tracing paper. These must be tagged securely to this answer book.

Advice

In all calculations, show clearly how you work out your answer.

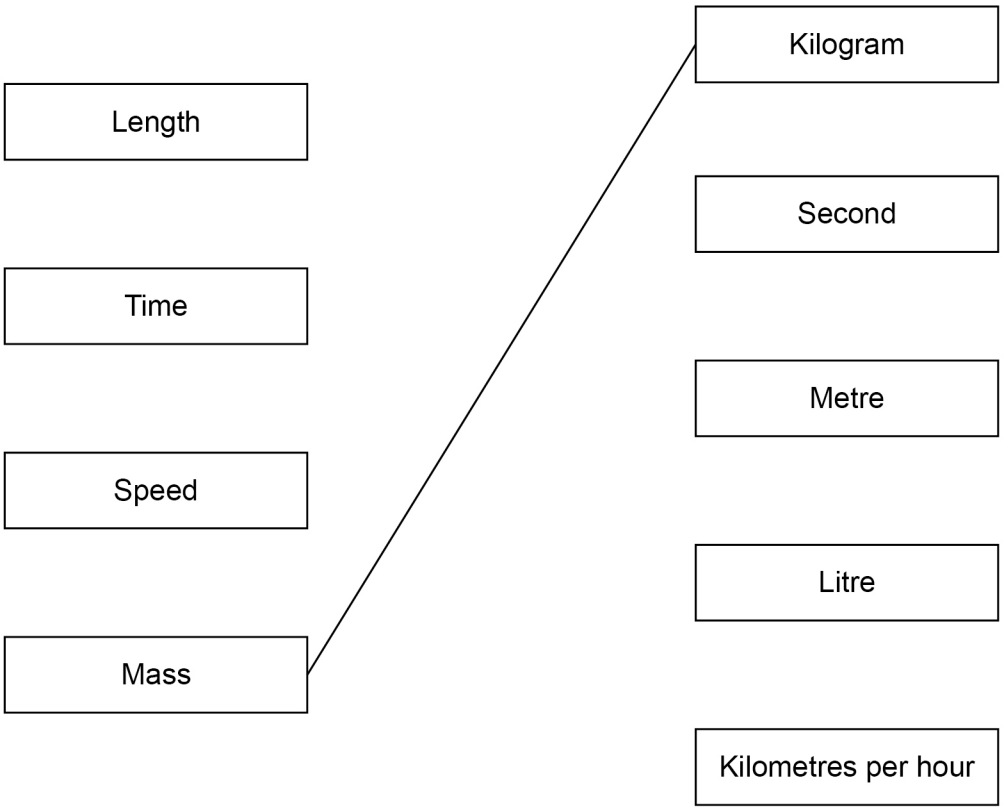
For Examiner's Use	
Pages	Mark
2–3	
4–5	
6–7	
8–9	
10–11	
12–13	
14–15	
16–17	
18–19	
20–21	
22–23	
24–25	
26	
TOTAL	

Answer **all** questions in the spaces provided.

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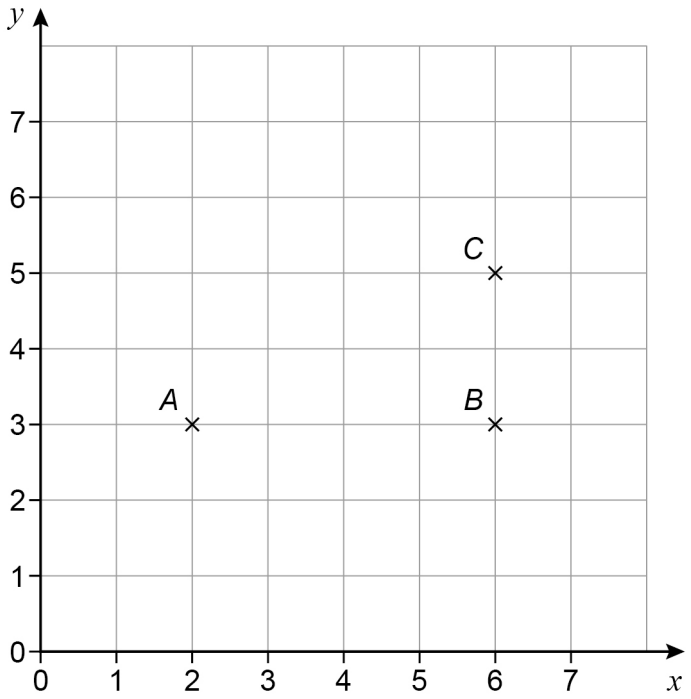
1 Match each box on the left to its correct unit on the right.

[2 marks]



Do not write outside the box

2 Here are three points on a centimetre grid.



2 (a) Write down the coordinates of point *A*.

[1 mark]

Answer (_____ , _____)

2 (b) *A*, *B* and *C* are three corners of rectangle *ABCD*.

Work out the area of *ABCD*.

[1 mark]

Answer _____ cm^2

4

Turn over ►

Do not write outside the box

3 (a) Write down the next number in the linear sequence.

10 16 22 28

[1 mark]

Answer _____

3 (b) Write down the next number in the linear sequence.

40 29 18 7

[1 mark]

Answer _____

3 (c) Write down the next number in the sequence of triangular numbers.

1 3 6 10

[1 mark]

Answer _____

Do not write outside the box

4 Tick a box for each statement below.

[2 marks]

	True	False
A cube has 8 vertices	☐	☐
A triangular **prism** has 6 faces	☐	☐
A triangular-based **pyramid** has 6 edges	☐	☐

5 100 cards are laid out for a game.

7 of the cards are winning cards.

Ellie picks a card at random.

Write down the probability that she picks a winning card.

[1 mark]

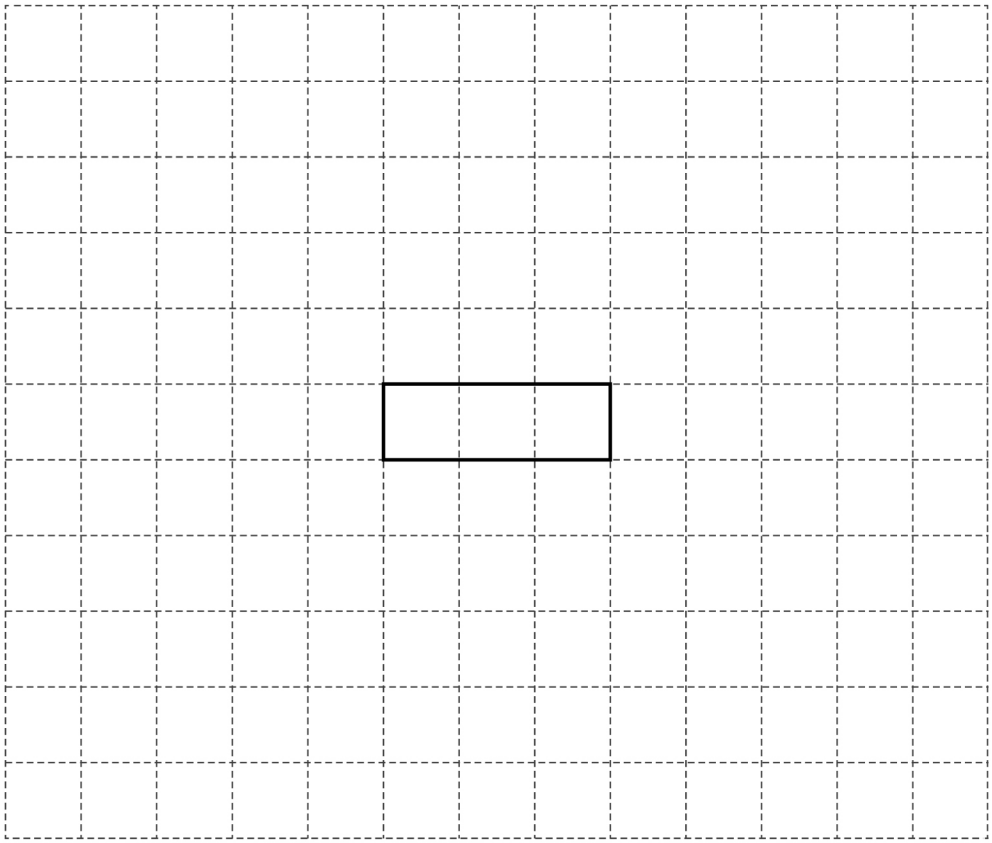
Answer _____

Turn over for the next question

6

Do not write outside the box

6



This rectangle is translated 4 squares right and 2 squares down.

Draw the translated rectangle.

[2 marks]

Do not write outside the box

7 (a) Complete the table.

[2 marks]

Fraction	Percentage
$\frac{7}{8}$	_____ %
_____	150%

7 (b) Write down the **four** prime numbers that are less than 10

[2 marks]

Answer _____ _____ _____ _____

Turn over for the next question

6

Do not write outside the box

8 A shop has two offers.

Sandwich £2.50 **Offer** All sandwiches half price	**Drink** £1.60 **Offer** Buy 3 drinks but only pay for 2

Tilly buys 4 sandwiches and 3 drinks.

In **total**, how much does she pay?

[4 marks]

Answer £ _____

Do not write outside the box

9 Amir buys 9 apples and 4 oranges.

- The **total** cost is £5.30
- Apples cost 42p each.

How much does **one** orange cost?

Give your answer in pence.

[3 marks]

Answer _____ pence

10 A hotel has 120 rooms.

20% of the rooms need clean towels.

- Les will put 4 clean towels in each of those rooms.
- Les has 85 clean towels.

How many **more** clean towels will he need?

[3 marks]

Answer _____

10

Do not write outside the box

11 (a) At a traffic light, cars either turn left, turn right or go straight ahead.

turn left : turn right : go straight ahead = 3 : 8 : 7

What is the modal direction of cars at the traffic light?

Circle your answer.

[1 mark]

turn left turn right go straight ahead cannot tell

11 (b) The table shows the percentages of fat in three types of milk.

Type of milk	Full fat	Semi-skimmed	Skimmed
% of fat	3.5	1.8	0.1

Write the percentage of fat for the three types of milk as a ratio.

Give your answer using **whole numbers**.

[2 marks]

Answer _____ : _____ : _____

Do not write outside the box

12

- a is half of b
- b is one third of c
- $c = 30$

Work out the value of $a + b + c$

You **must** show your working.

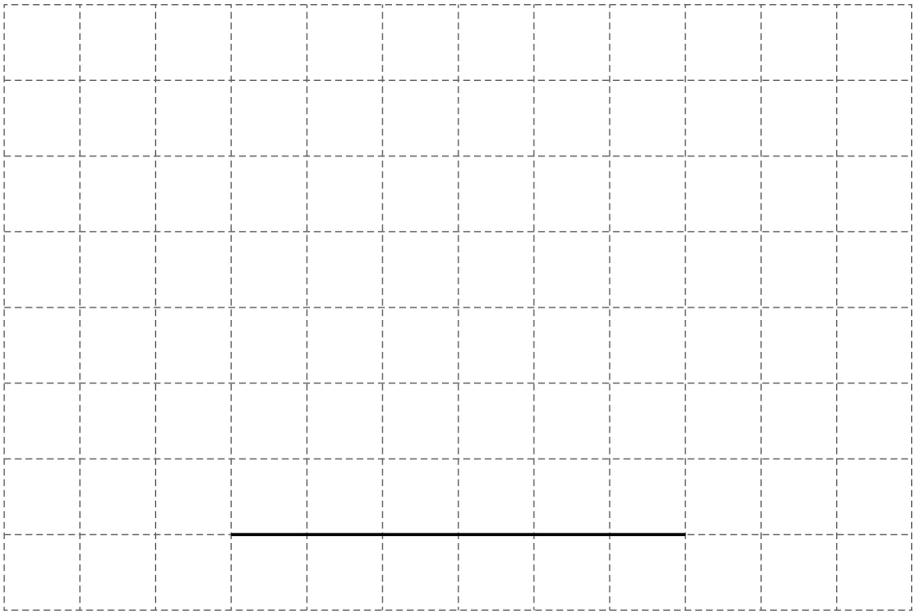
[3 marks]

$a + b + c =$ _____

13 On the centimetre grid, draw a right-angled triangle with an area of 12 cm^2

One side has been drawn for you.

[2 marks]



8

Turn over ►

Do not write outside the box

14 The number of hours that Jodie works on two days is shown.

Friday	Saturday
7	4

14 (a) On Friday, Jodie is paid £98

Assume that she gets the **same** hourly rate of pay on Saturday.

Work out the **total** amount she is paid for the two days.

[3 marks]

Answer £ _____

14 (b) In fact, Jodie gets a higher hourly rate of pay on Saturday.

What does this mean about the total she is paid for the two days?

Tick **one** box.

[1 mark]

☐ It is greater than the answer to part (a)

☐ It is the same as the answer to part (a)

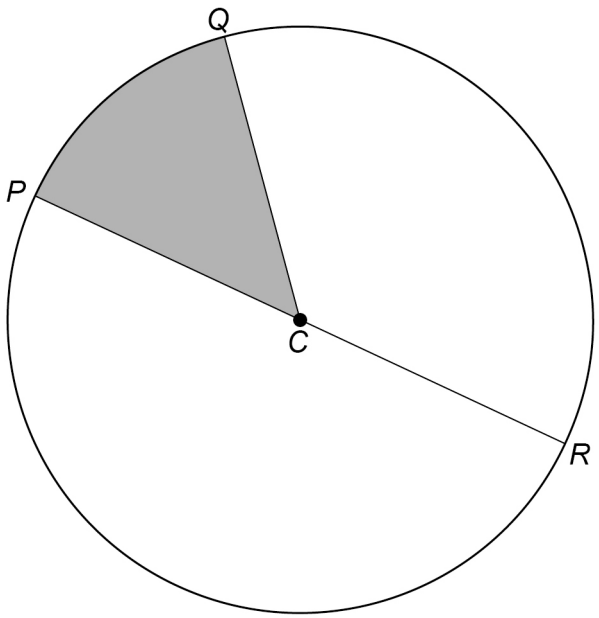
☐ It is less than the answer to part (a)

☐ It is not possible to say

Do not write outside the box

15 *P*, *Q* and *R* are points on a circle, centre *C*.

PCR is a straight line.



Tick a box for each statement.

[2 marks]

	True	**False**
PC is half the length of *PR*.	☐	☐
QC is a chord.	☐	☐
The shaded section is a segment.	☐	☐

6

Turn over ►

Do not write outside the box

16 The table shows information about the number of pigs on two farms.

Farm A	630 pigs to the nearest 10
Farm B	600 pigs to the nearest 100

16 (a) Tick **one** box for each statement.

[3 marks]

	Definitely True	**Might be true**	**Cannot be true**
Farm A has 637 pigs.	☐	☐	☐
Farm A has 630 pigs.	☐	☐	☐
Farm B has 550 pigs.	☐	☐	☐

16 (b) Jenny uses the data from the table and says,

''Farm A definitely has more pigs than Farm B, because 630 is more than 600''

Is Jenny correct?

Give a reason for your answer.

[1 mark]

Tick a box.

Yes ☐ No ☐

Reason _____

_____

_____

_____

Do not write outside the box

17 Dina makes milkshakes using this recipe.

Mix syrup and milk in the ratio syrup : milk = 1 : 3

Dina wants each milkshake to be 320 millilitres.

She has 0.5 litres of syrup.

Does Dina have enough syrup for 6 milkshakes?

Tick a box.

Yes ☐ No ☐

You **must** show your working.

[4 marks]

8

Turn over ►

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18 A bag contains only red discs, blue discs and green discs.

Colour	Probability	Number of discs
Red	0.3	120
Blue		60
Green		

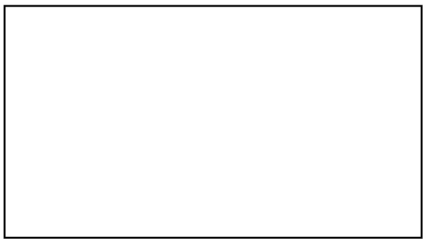
Complete the table.

[3 marks]

Do not write outside the box

19 Here is a diagram of a rectangular picture frame.

Not drawn accurately



Here is a formula to calculate the cost of the picture frame.

$$C = 16 + \frac{7}{10}P$$

C is the cost in pounds

P is the perimeter of the frame in cm

Work out the cost of the picture frame.

[3 marks]

Answer £ _____

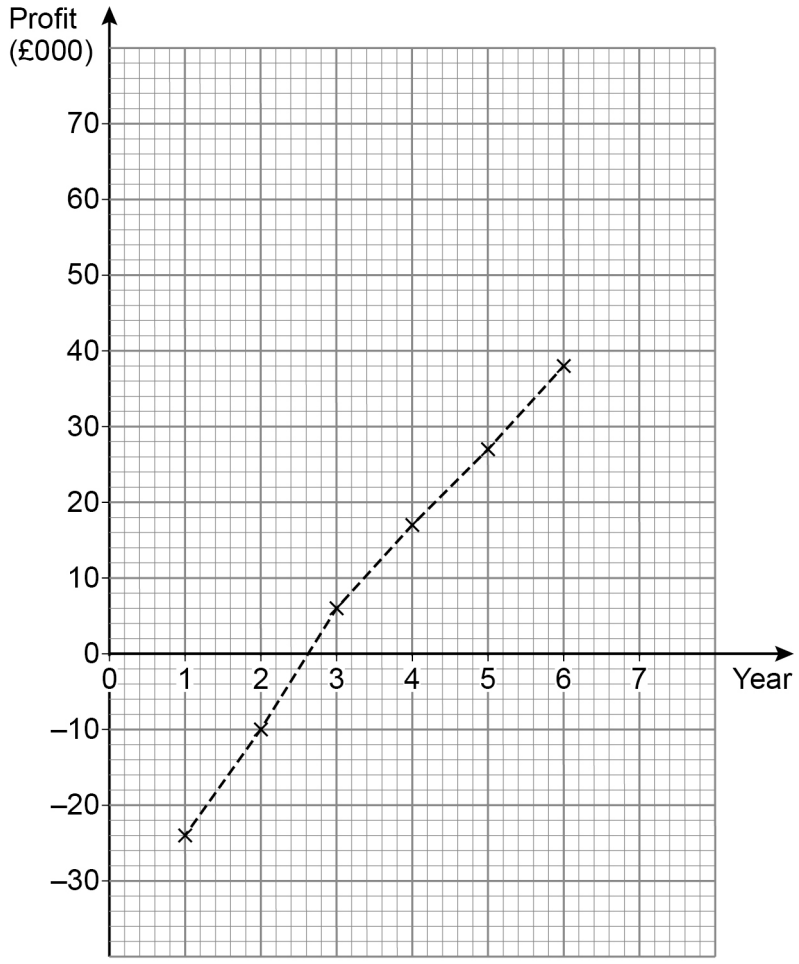
6

Turn over ►

Do not write outside the box

20 A business recorded the profit or loss made in each of its first 6 years.

The time series graph shows the data.



20 (a) After how many whole years was the **total** profit greater than the **total** loss?

You **must** show your working.

[2 marks]

Answer _____

20 (b) Use the graph to predict the profit for **year 7**

[1 mark]

Answer £ _____

Do not write outside the box

21 Towns P and Q are 35 km apart.

On a map, the distance PQ is 2 cm

Work out the scale of the map.

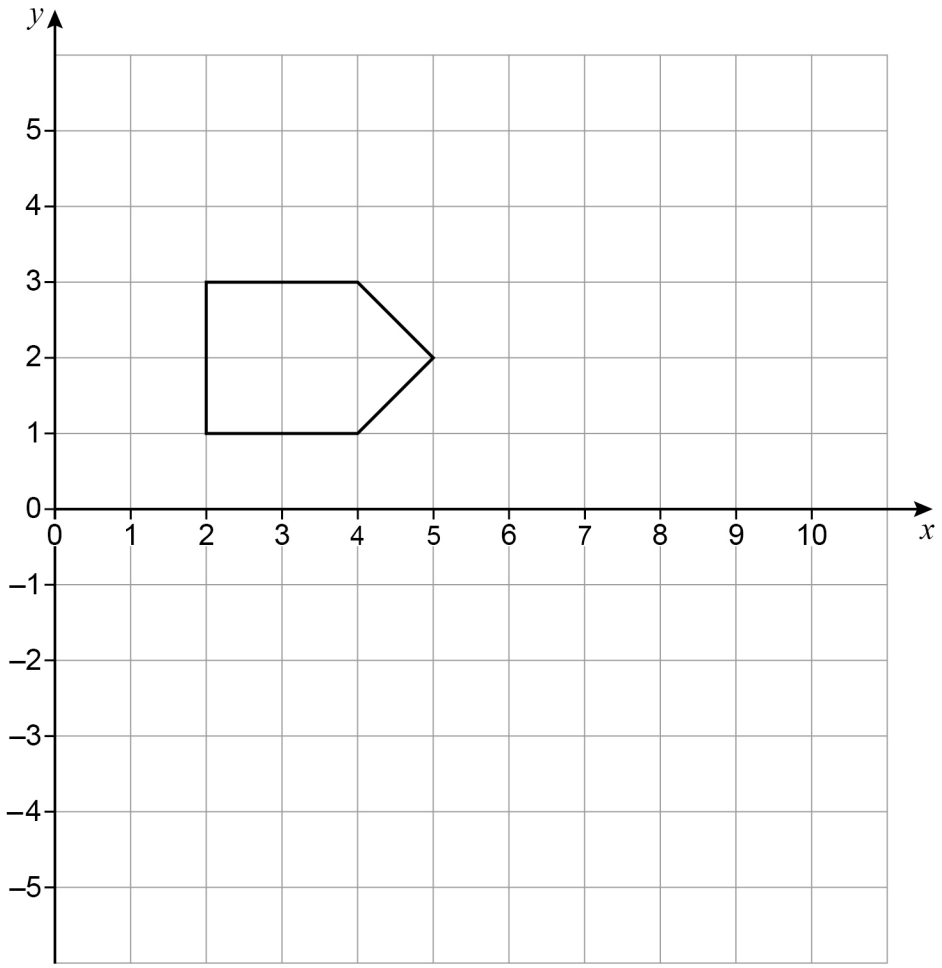
Give your answer in the form 1 : n

[2 marks]

Answer 1 : _____

22 Rotate the shape below 90° anti-clockwise about (5, –1).

[2 marks]



7

Turn over ►

Do not write outside the box

23 (a) Work out the nth term of the linear sequence that starts

8 15 22 29 ….

[2 marks]

Answer _____

23 (b) The nth term of a different linear sequence is $2n - 3$

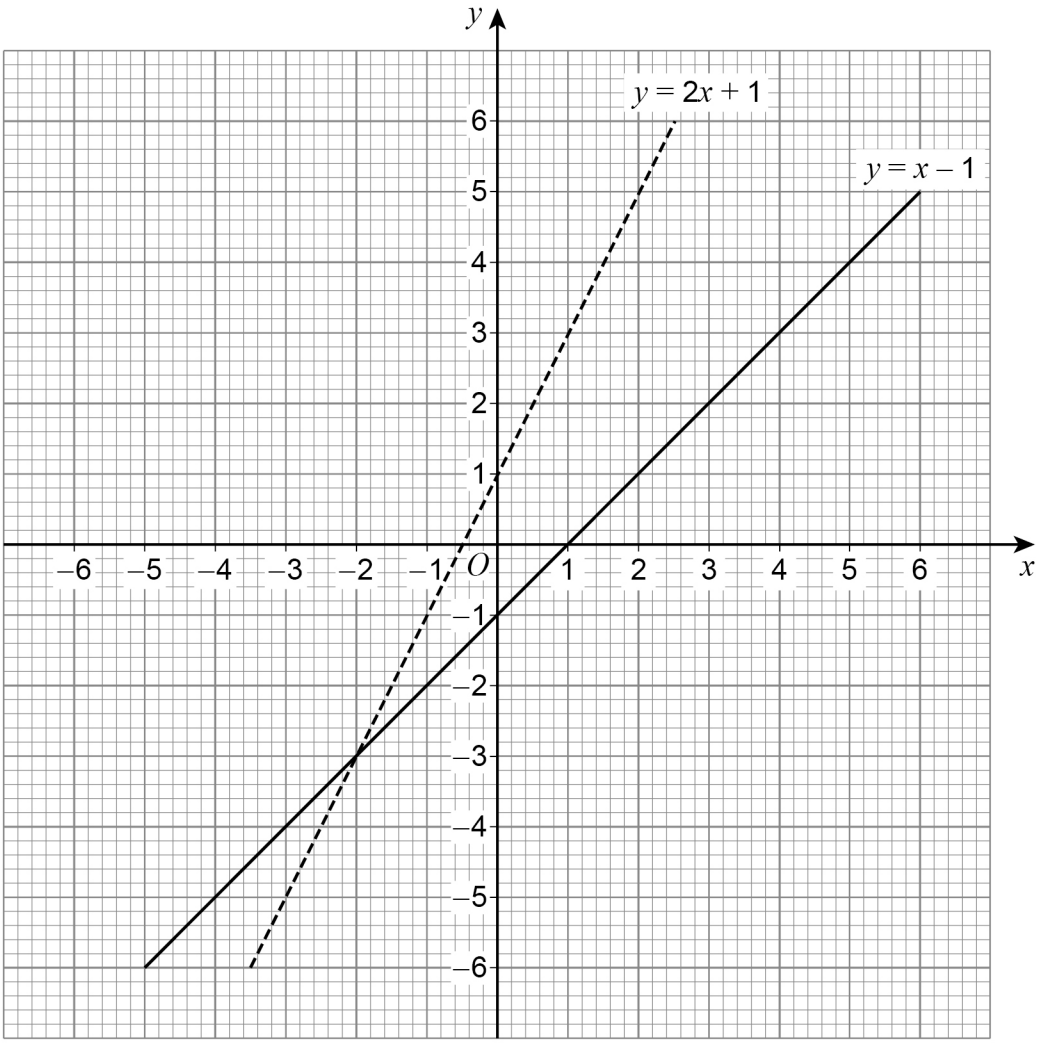
Work out the **position** of the term in this sequence that is the first to be greater than 100

[2 marks]

Answer _____

Do not write outside the box

24 Here are the graphs of $y = 2x + 1$ and $y = x - 1$



Use the graphs to solve the simultaneous equations

$y = 2x + 1$ and $y = x - 1$

[1 mark]

$x =$ _____ $y =$ _____

5

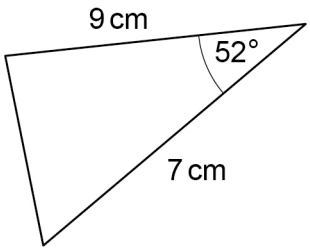
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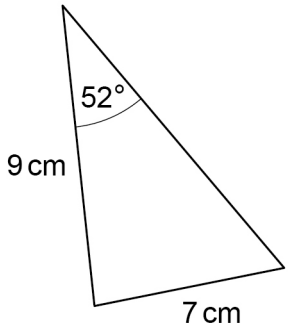
25 Here are four triangles.

Not drawn accurately

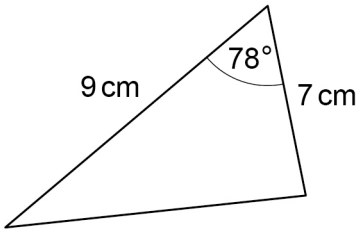
A



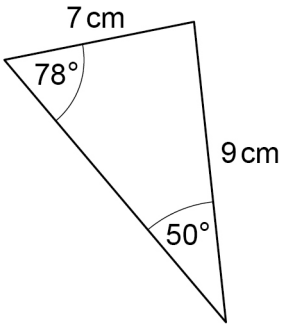
B



C



D



Circle the **two** letters of the triangles that must be congruent.

[1 mark]

A B C D

Do not write outside the box

26 x is an **even** whole number.

$$4 < x - 1 \leqslant 11$$

Work out **all** the possible values of x.

[3 marks]

Answer _____

Turn over for the next question

4

Do not write outside the box

27 A building has 36 flats.

The table shows information about the number of people living in the flats.

Number of people	Number of flats	
1	3	
2	10	
3	17	
4	6	

Show that the mean number of people per flat is **less than** 3

[3 marks]

Do not write outside the box

28 All the students at a school are asked which they prefer, Science or English.

	Number of students	Fraction that prefer Science
Year 11	225	$\frac{1}{3}$
Other years	975	$\frac{3}{5}$

What **percentage** of the students at the school prefer Science?

[4 marks]

Answer _____ %

7

Turn over ►

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29 A track is a circle of diameter 15 metres.

A horse runs at an average speed of 6 metres per second.

Work out the time, in seconds, the horse takes to run around the track.

Give your answer as a decimal.

[3 marks]

Answer _____ seconds

END OF QUESTIONS

3

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Question number	**Additional page, if required.** **Write the question numbers in the left-hand margin.**

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