Pearson Edexcel Level 1/Level 2 GCSE (9–1)

Monday 10 November 2025

Morning (Time: 1 hour 30 minutes)

Paper reference **1MA1/3F**

Mathematics

PAPER 3 (Calculator)
Foundation Tier

You must have: Ruler graduated in centimetres and millimetres, protractor, pair of compasses, pen, HB or B pencil, eraser, calculator, Formulae Sheet (enclosed). Tracing paper may be used.

Total Marks

Instructions

- Use **black** ink or ball-point pen.
- If pencil is used for diagrams/sketches/graphs it must be dark (HB or B).
- **Fill in the boxes** at the top of this page with your name, centre number and candidate number.
- Answer **all** questions.
- Answer the questions in the spaces provided
  – *there may be more space than you need.*
- You must **show all your working.**
- Diagrams are **NOT** accurately drawn, unless otherwise indicated.
- **Calculators may be used.**
- If your calculator does not have a π button, take the value of π to be 3.142 unless the question instructs otherwise.

Information

- The total mark for this paper is 80
- The marks for **each** question are shown in brackets
  – *use this as a guide as to how much time to spend on each question.*

Advice

- Read each question carefully before you start to answer it.
- Try to answer every question.
- Check your answers if you have time at the end.

Turn over ▶

1   Write the number twenty five thousand three hundred in figures.

....

(Total for Question 1 is 1 mark)

2   Write 23% as a fraction.

....

(Total for Question 2 is 1 mark)

3   Simplify $2p \times 3$

....

(Total for Question 3 is 1 mark)

4   Write 853 to the nearest hundred.

....

(Total for Question 4 is 1 mark)

5   Change 3 litres into millilitres.

.... millilitres

(Total for Question 5 is 1 mark)

6 Lara asks her students which device they use most, a desktop, a laptop or a phone.

Here is an accurately drawn pie chart to show her results.
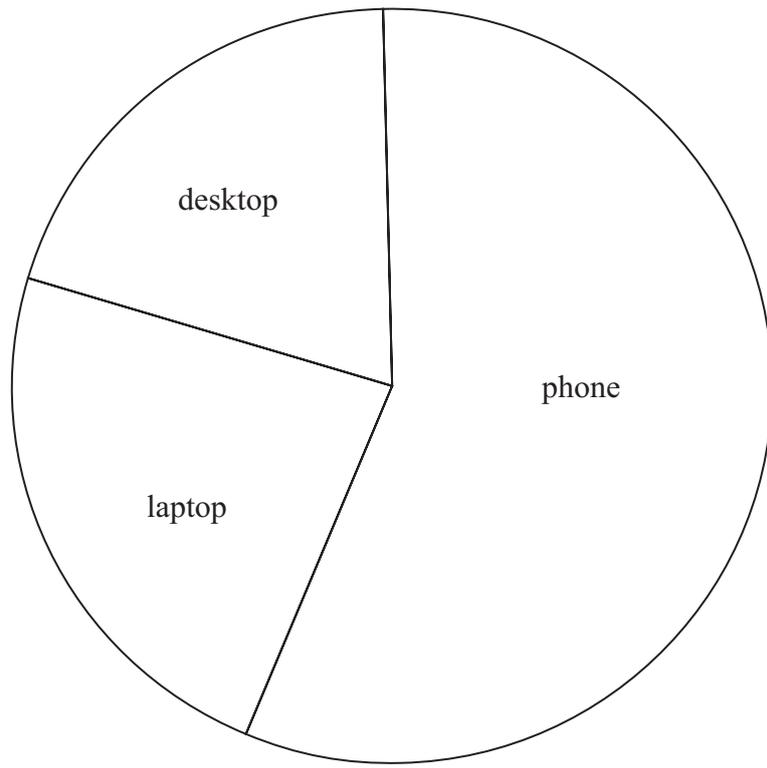
(a) Which device did the greatest number of students say they use most?

....

(1)

(b) Measure the angle in the pie chart representing laptop.

°
....

(1)

Ben says,

"More students said they use a laptop most than said they use a desktop most."

(c) Is Ben correct?
You must give a reason for your answer.

....

....

....

(1)

(Total for Question 6 is 3 marks)

7 There are 3 friends.

Anita has £36
Faisal has £48
Gary has 4 times the amount of money that Anita has.

These 3 friends then share out the total amount of money equally.

Work out how much money each friend gets.

£...

(Total for Question 7 is 3 marks)

8 Jon is going to buy boxes of crisps to sell in his cafe.

There are 48 packets of crisps in each box.
Each box of crisps costs £25

The table below shows the number of packets of crisps Jon sold in each of the last four weeks.

	Number of packets of crisps
Week 1	150
Week 2	145
Week 3	162
Week 4	119

Jon assumes he will sell the same number of packets of crisps in the next four weeks.

(a) Find the total cost of the boxes of crisps Jon needs to buy for the next four weeks.

£...

(4)

Jon's assumption is wrong.

(b) How might this affect the total cost of the boxes of crisps he needs?
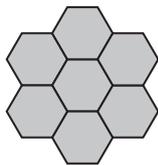   Give a reason for your answer.

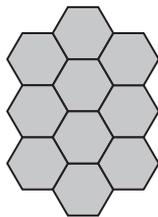..

....

....

(1)

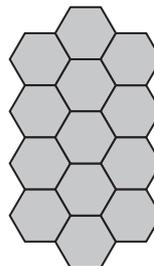**(Total for Question 8 is 5 marks)**

9 Here is a sequence of patterns made from regular hexagons.

pattern number 1   pattern number 2   pattern number 3

The total number of hexagons in pattern number 1 is 7

(a) Find the total number of hexagons in pattern number 4

....

(1)

The total number of hexagons in pattern number 100 is 304

(b) Work out the total number of hexagons in pattern number 105

....

(2)

(Total for Question 9 is 3 marks)

10 Luxmi drives from her home to her friend's house.
Here is a travel graph for her journey.
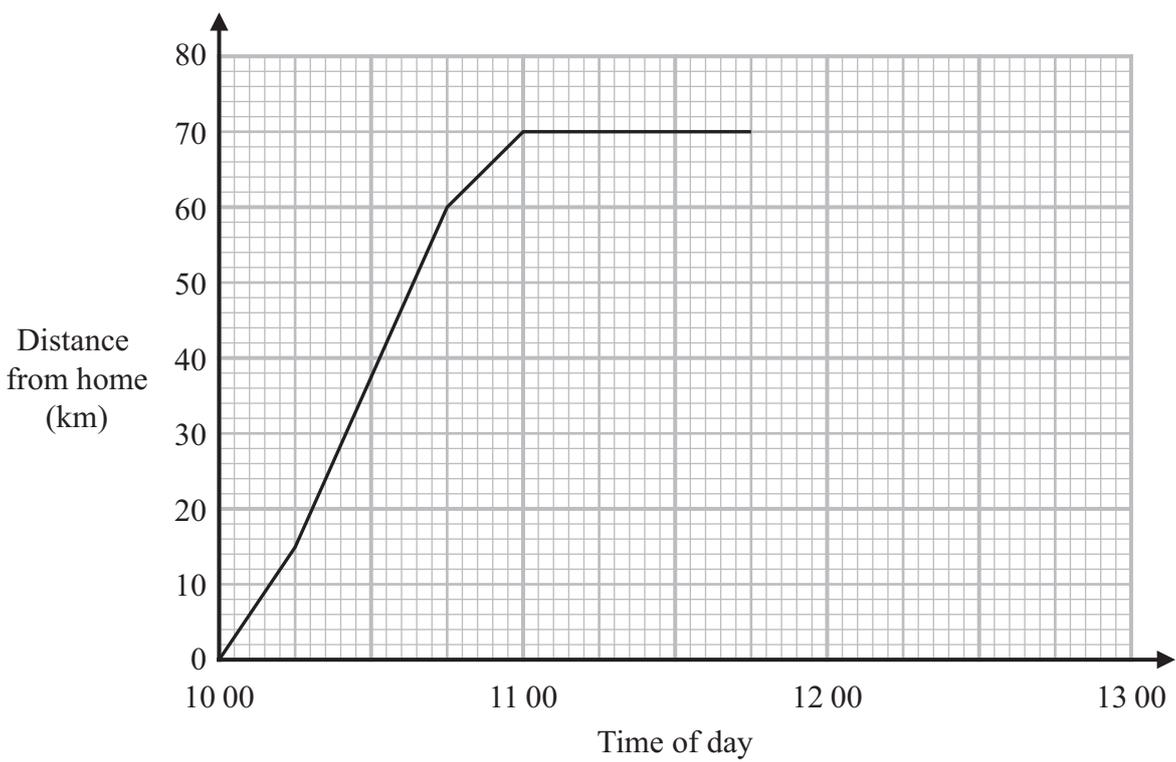
(a) How far is Luxmi from home at 10 30?

.... km

(1)

(b) At what time is Luxmi 60 km from home?

....

(1)

Luxmi leaves her friend's house at 11 45 to return home.
She drives at a steady speed.
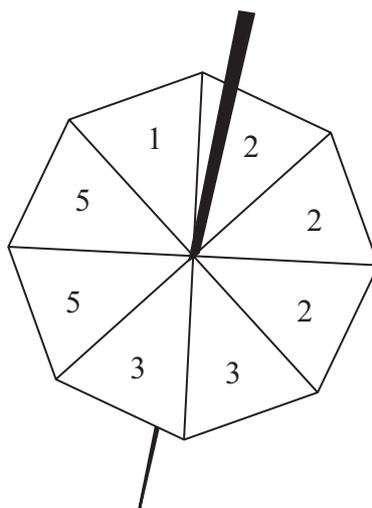She gets home at 12 45

(c) Show this information on the travel graph.

(1)

(Total for Question 10 is 3 marks)

11 Here is a fair 8-sided spinner.

Jordan spins the spinner once.

(a) Is Jordan more likely to get an even number or get an odd number?
Give a reason for your answer.

....

....

....

(1)

Ezra spins the spinner once.

(b) Write down the probability that Ezra gets a 2

....

(1)

Remi spins the spinner 200 times.

(c) Work out an estimate for the number of times Remi gets a 5

....

(2)

(Total for Question 11 is 4 marks)

12 The diagram shows three straight lines.
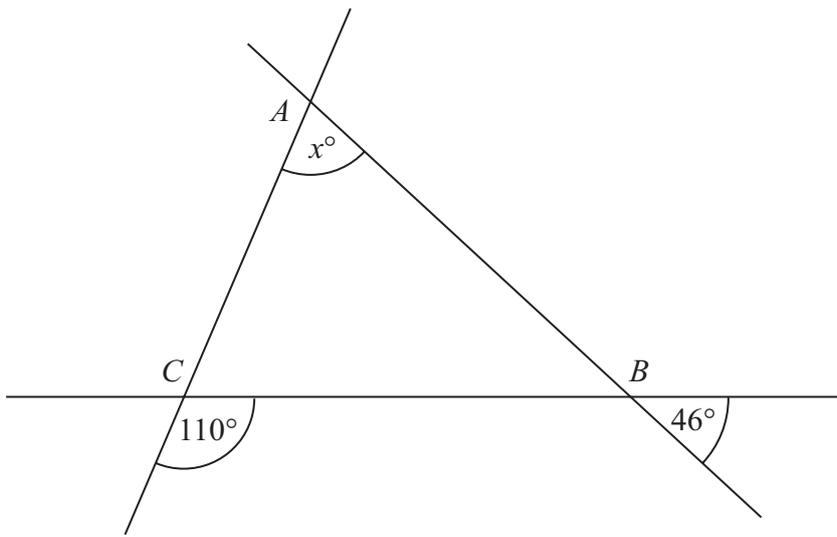
Find the value of x.

You must give a reason for each stage of your working.

$x =$ ....

(Total for Question 12 is 5 marks)

13 This shape is made from five identical rectangles.

←——— 12 cm ———→
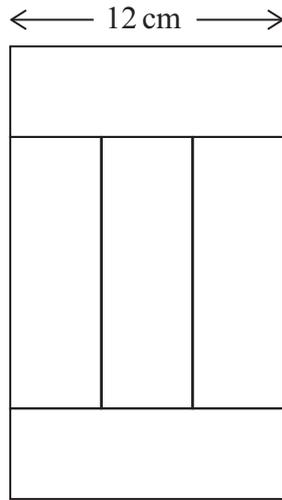
Work out the area of the shape.

.... cm²

(Total for Question 13 is 3 marks)

14 20% of a number is 48

(a) Work out 50% of the same number.

....

(2)

(b) Increase 280 by $17\frac{1}{2}$ %

....

(2)

(Total for Question 14 is 4 marks)

15 $y = 3x - 4$

(a) Find the value of y when $x = 6$

$$y = \text{...}$$

$5n + 2p = 65$
$n = 10$

(b) Find the ratio $n:p$

....

(Total for Question 15 is 6 marks)

16 Five numbers have a mean of 7 and a mode of 10
Three of the numbers are 3, 4 and 10

Find the other two numbers.
You must show all your working.

.... , ...

(Total for Question 16 is 3 marks)

17 The diagram shows a solid prism.

16 cm

12 cm

10 cm

8 cm

18 cm
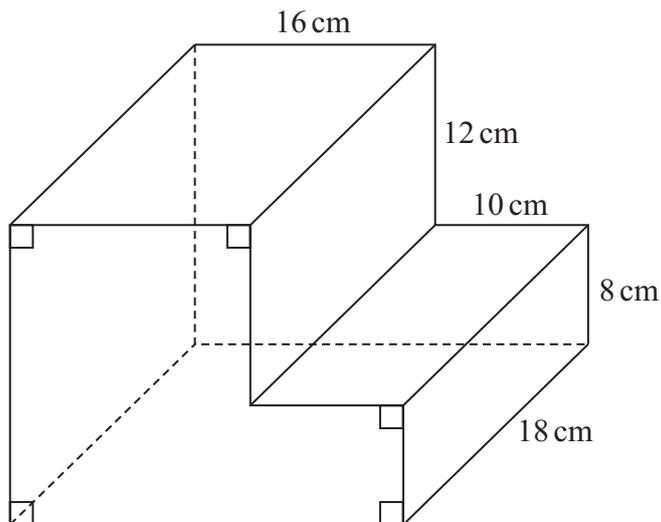
Work out the volume of the prism.

.... cm^3

(Total for Question 17 is 4 marks)

18 (a) (i) Work out the value of $\sqrt{\dfrac{93 - 8.1}{34 + 7.7}}$

Write down all the figures on your calculator display.

....

(2)

(ii) Write your answer to part (i) correct to 3 significant figures.

....

(1)

(b) Work out the value of the reciprocal of 1.25

....

(1)

(Total for Question 18 is 4 marks)

19 Two numbers are in the ratio $5:3$
The difference between the two numbers is 18

(a) Find the two numbers.

.... , ...

(2)

Three numbers are in the ratio $4:7:2$
The largest number is 210

(b) Find the sum of these three numbers.

....

(3)

(Total for Question 19 is 5 marks)

20 (a) Complete the table of values for $y = x^2 - 2x - 1$

x	-2	-1	0	1	2	3	4
y		2			-1		7

(2)

(b) On the grid, draw the graph of $y = x^2 - 2x - 1$ for values of x from -2 to 4
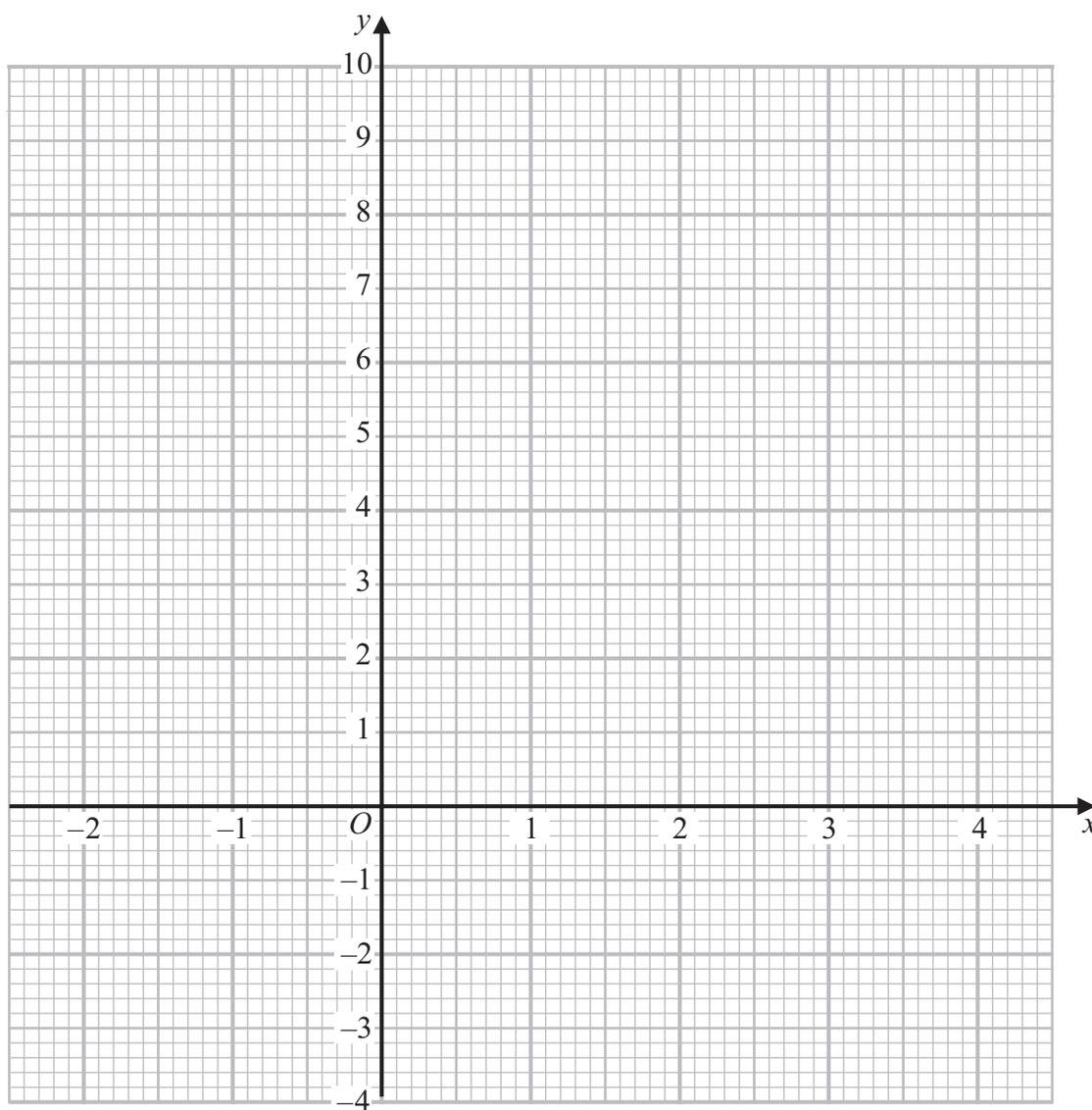
(2)

(c) Use your graph to find estimates for the solutions of $x^2 - 2x - 1 = 3$

....

(2)

(Total for Question 20 is 6 marks)

Turn over ▶

21 (a) Calculate the value of $\dfrac{8.4 \times 10^4}{3.2 \times 10^5}$

Give your answer in standard form.

....
(2)

$y = 0.83$ correct to 2 decimal places.

(b) Complete the error interval for y.

.... $\leqslant y <$ ....
(2)

(Total for Question 21 is 4 marks)

22 Eric buys a car for £19 950

Every year the car loses 5% of the value it had at the start of the year.

Eric works out the value of his car 4 years after he bought it.

Here is Eric's working.

$$4 \times 5\% = 20\%$$
$$0.2 \times 19\,950 = 3990$$
$$19\,950 - 3990 = 15\,960$$

Eric's method is wrong.

(a) Explain why.

....

....

....

(1)

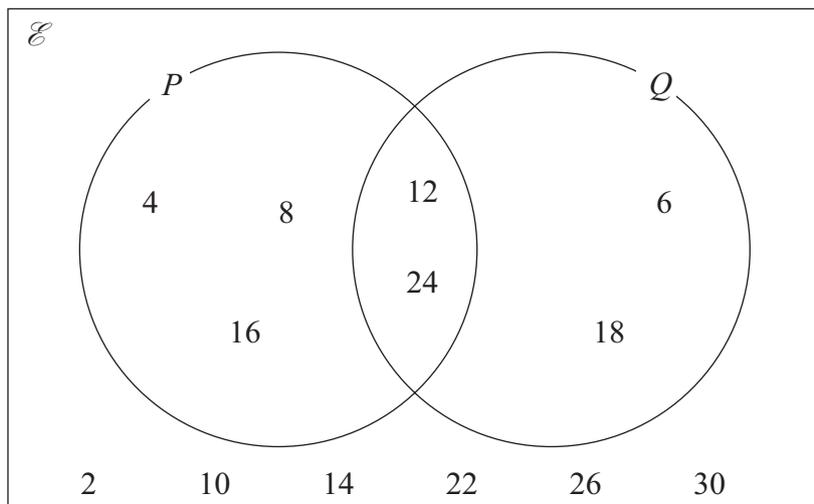(b) Work out the difference between Eric's answer of £15 960 and the real value of the car 4 years after he bought it.

£...

(4)

(Total for Question 22 is 5 marks)

23 Here is a Venn diagram.

(a) Write down the numbers in set

(i) $P \cap Q$

....

(1)

(ii) $P \cup Q$

....

(1)

(b) How many numbers are in set P'?

....

(1)

A number is chosen at random from the universal set $\mathcal{E}$

(c) Find the probability that the number is in set $P \cap Q$

....

(2)

(Total for Question 23 is 5 marks)

TOTAL FOR PAPER IS 80 MARKS