

Write your name here	
Surname	Other names
Centre Number	Candidate Number
Pearson Edexcel Level 1/Level 2 GCSE (9–1)	
Mathematics Paper 2 (Calculator) Aiming for Grade 4 Foundation Tier	
Spring 2024 Practice Paper 45 marks 45 minutes	Paper Reference 1MA1/2F
You must have: Ruler graduated in centimetres and millimetres, protractor, pair of compasses, pen, HB pencil, eraser, calculator. Tracing paper may be used.	Total Marks

Instructions

- Use **black** ink or ball-point pen.
- **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 43. There are 15 questions.
- Questions have been broadly arranged in an ascending order of mean difficulty, as found by students achieving Grade 4 in the Summer and November 2023 examinations.
- Questions marked with an asterisk (*) also appear on the Higher Tier paper.
- 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

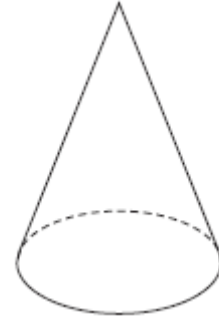
- Read each question carefully before you start to answer it.
- Keep an eye on the time.
- Try to answer every question.
- Check your answers if you have time at the end.

Answer all questions.

Write your answers in the spaces provided.

You must write down all the stages in your working.

1 Here is a 3-D shape.



(a) Write down the name of this 3-D shape.

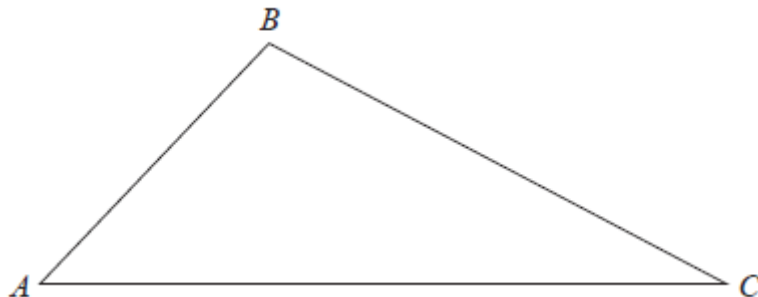
..... (1)

(b) In the space below, draw a sketch of a triangular prism.

(1)

(Total for Question 1 is 2 marks)

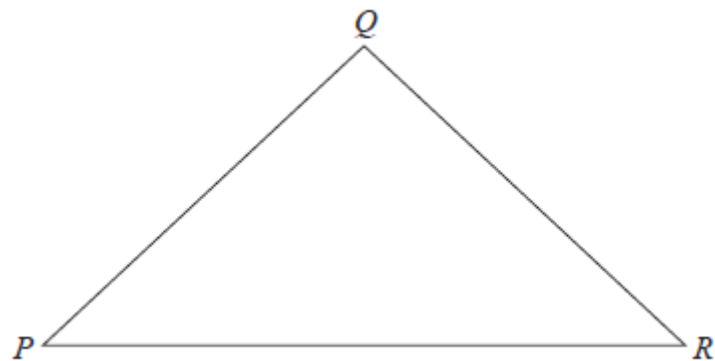
2 Here is a triangle.



(a) Measure the length of AC.

..... cm
(1)

Here is a different triangle.



$$QP = QR$$

(b) Write down the mathematical name of this triangle.

.....
(1)

(Total for Question 2 is 2 marks)

3 240 people work at a factory.

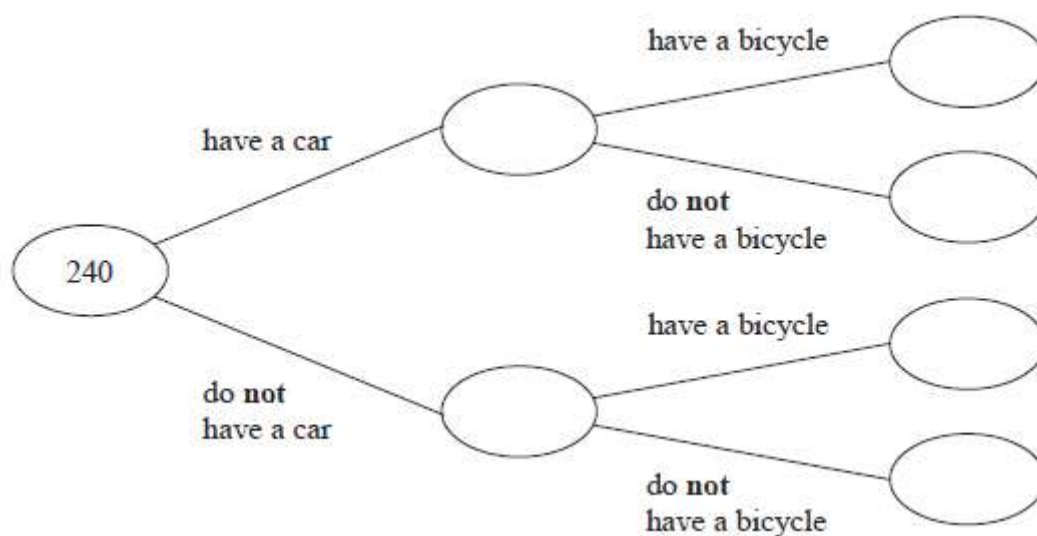
Of these people

150 have a car

110 have a bicycle

65 of the people who have a bicycle do **not** have a car.

(a) Use this information to complete the frequency tree.



(3)

(b) What percentage of the 150 people who have a car also have a bicycle?

.....%

(2)

(Total for Question 3 is 5 marks)

- *4** Last year a family recycled 800 kg of household waste.
57% of this waste was paper and glass.

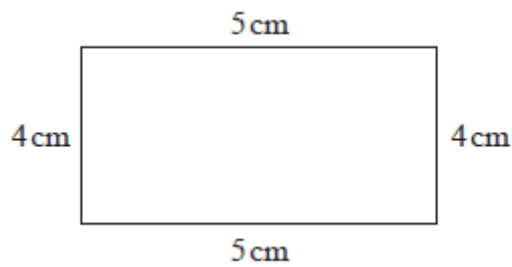
weight of paper recycled : weight of glass recycled = 12 : 7

Calculate the weight of glass the family recycled.

..... kg

(Total for Question 4 is 3 marks)

5 Milo is trying to find the area of this rectangle.



He writes,

“The area is 400 cm^2 because $5 \times 4 \times 5 \times 4 = 400$ ”

(a) Explain what is wrong with Milo’s method.

.....

.....

.....

(1)

Anya works out the area of a shape.

Her answer is 86 cm.

(b) Explain why her answer cannot be fully correct.

.....

.....

.....

(1)

(Total for Question 5 is 2 marks)

***6** (a) Expand and simplify $3(2y - 5) + 7(y + 2)$

.....

(2)

(b) Factorise fully $6x^2 + 15x$

.....
(2)

(Total for Question 6 is 4 marks)

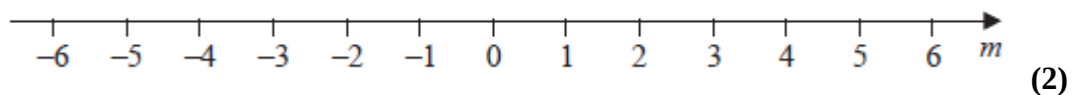
***7** $-2 \leq n < 5$

n is an integer.

(a) Write down the greatest possible value of n .

.....
(1)

(b) On the number line below, show the inequality $-4 \leq m < 1$



(Total for Question 7 is 3 marks)

- *8** Tamsin buys a house with a value of £150 000
The value of Tamsin's house increases by 4% each year.
Rachel buys a house with a value of £160 000
The value of Rachel's house increases by 1.5% each year.
At the end of 2 years, whose house has the greater value?
You must show how you get your answer.

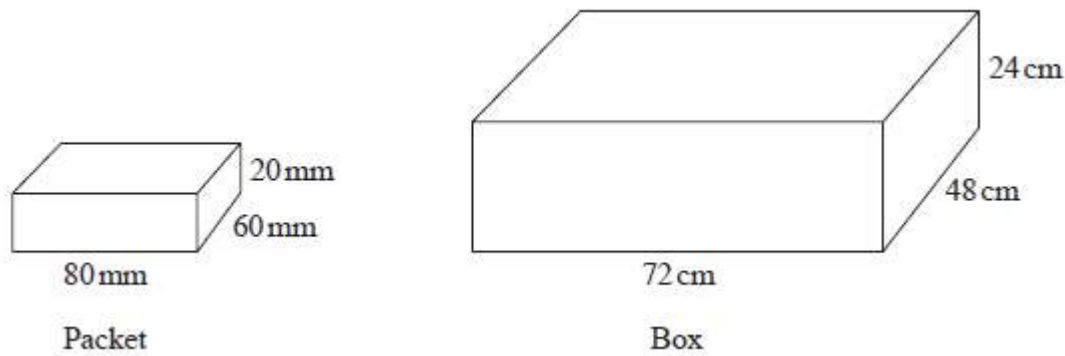
(Total for Question 8 is 4 marks)

- 9** Paulo drives at an average speed of 56 km / h for 1 hour 45 minutes.
Work out the distance Paulo drives.

..... km

(Total for Question 9 is 3 marks)

10 Packets of sweets are put into boxes.



Each packet is a cuboid, 80 mm by 60 mm by 20 mm.
Each box is a cuboid, 72 cm by 48 cm by 24 cm.

Work out the greatest number of packets that can be put into each box.

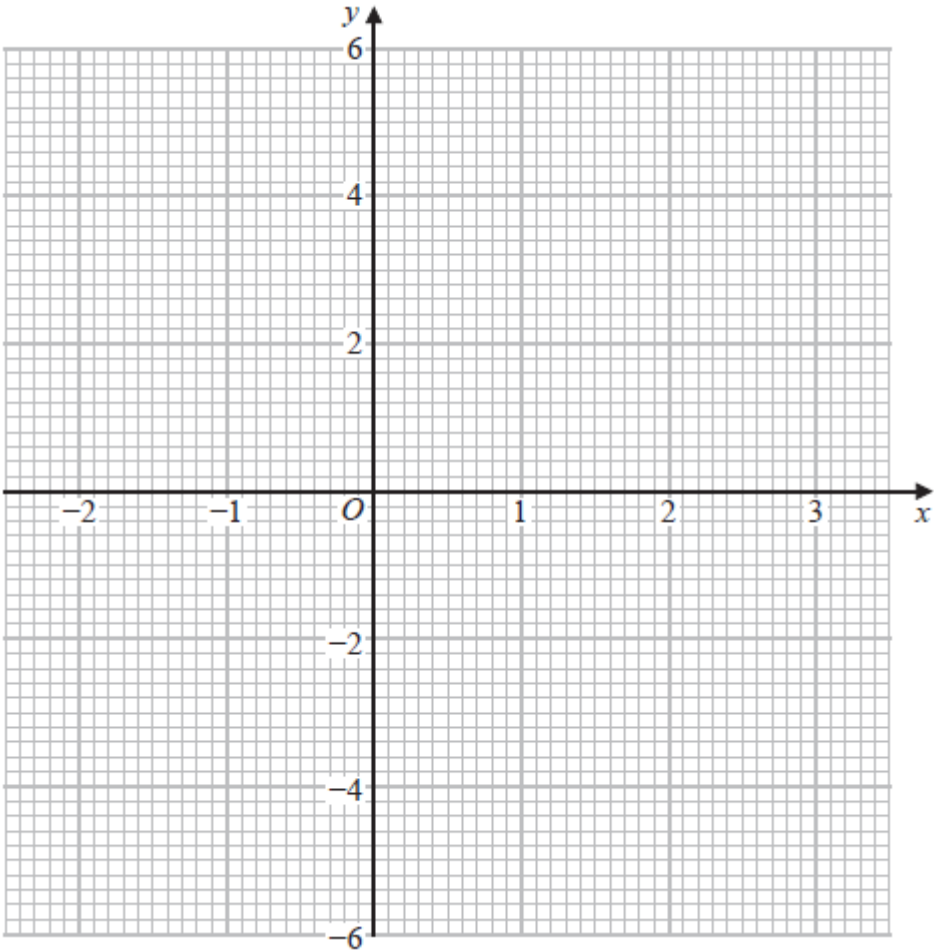
.....
(Total for Question 10 is 4 marks)

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

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

(2)

(b) On the grid, draw the graph of $y = x^2 - x - 2$ for values of x from -2 to 3



(2)

(Total for Question 11 is 4 marks)

12 Rima is going to roll a fair 6-sided dice.

Choose the word that best describes the probability that the dice will land on the number 3

impossible	unlikely	evens	likely	certain
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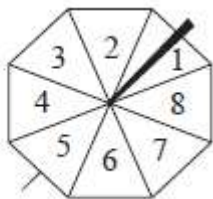
(Total for Question 12 is 1 mark)

***13** Solve $5x - 14 = 52 - x$

$x = \dots\dots\dots$

(Total for Question 13 is 3 marks)

14 Here is a fair ordinary dice and a fair 8-sided spinner.



Charlie throws the dice once and spins the spinner once.

Is Charlie more likely to get

- a number less than 3 on the dice
- or** a number greater than 5 on the spinner?

You must show all your working.

(Total for Question 14 is 3 marks)

***15** Andrew invests £4500 in a savings account for 2 years.
The account pays compound interest at a rate of 3.4% per year.
Calculate how much Andrew has in this savings account at the end of the 2 years.

£.....

(Total for Question 15 is 2 marks)

TOTAL FOR PAPER IS 45 MARKS