

Write your name here

Surname	Other names
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Centre Number	Candidate Number									
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Pearson Edexcel
Level 1/Level 2 GCSE (9–1)

Mathematics

Paper 2 (Calculator)

Aiming for 4

Foundation Tier

Spring 2022 Practice Paper Time: 1 hour 30 minutes	Paper Reference <h2 style="margin: 0;">1MA1/2F</h2>
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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 80. There are 33 questions.
- Questions have been arranged in an ascending order of mean difficulty, as found by all students in the November examinations.
- 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 THIRTY THREE questions.

Write your answers in the spaces provided.

You must write down all the stages in your working.

1 A baker has three bags of flour, **A**, **B** and **C**.

Bag **A** and bag **B** contain the same amount of flour.
Bag **C** contains 940 g of flour.

In the three bags, there is a total of 2500 g of flour.

Work out the amount of flour in bag **A**.

..... g

(Total for Question 1 is 3 marks)

2 Alec needs to work out the value of $2 + 3 \times 4$

He writes

$$2 + 3 = 5 \text{ and } 5 \times 4 = 20, \text{ so } 2 + 3 \times 4 = 20$$

Alec is wrong.
Explain why.

.....

.....

.....

(Total for Question 2 is 1 mark)

3 Write 31% as a fraction.

.....
(Total for Question 1 is 1 mark)

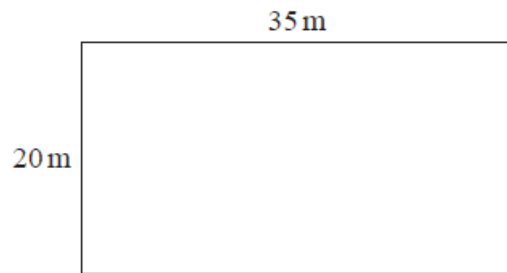
4 Write 0.37 as a fraction.

.....
(Total for Question 4 is 1 mark)

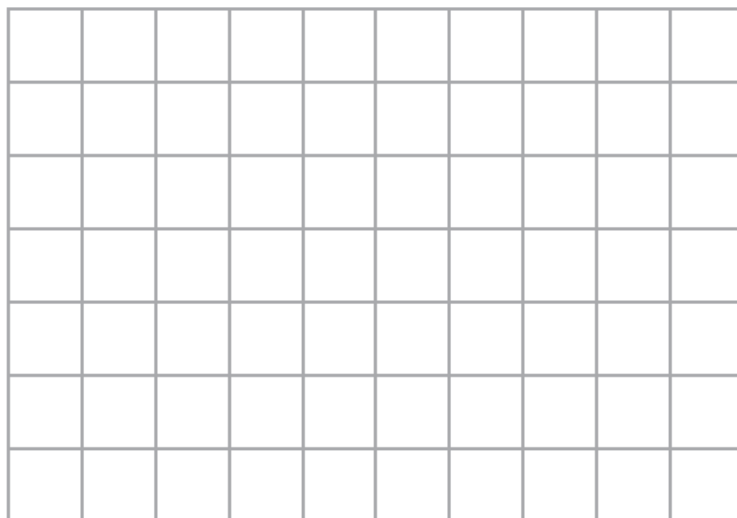
5 Write $\frac{1}{4}$ as a percentage.

.....%
(Total for Question 5 is 1 mark)

6 The diagram shows a rectangle.

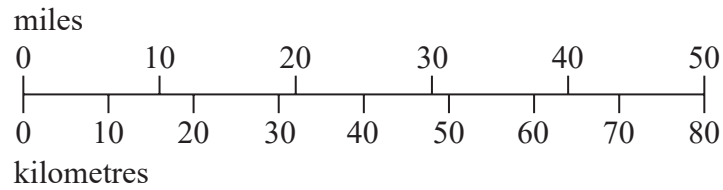


On the centimetre grid below, draw an accurate scale drawing of this rectangle.
Use a scale of 1 cm to represent 5 m.



(Total for Question 6 is 2 marks)

7 This scale can be used to change between kilometres and miles.



(a) Use the scale to change 40 kilometres to miles.

..... miles
(1)

Here is an approximate rule to change from kilometres to miles.

Divide the distance in kilometres by 10 and then multiply by 6

(b) Use this approximate rule to change 40 kilometres to miles.

..... miles
(2)

(c) Compare your answer to part (b) with your answer to part (a).

.....
.....
.....
(1)

(Total for Question 7 is 4 marks)

8 Here is a list of whole numbers from 21 to 30

21 22 23 24 25 26 27 28 29 30

(a) From the list, write down a square number.

.....
(1)

(b) From the list, write down a multiple of 8

.....
(1)

(Total for Question 8 is 2 marks)

9 Write the following numbers in order of size.
Start with the smallest number.

1.02 0.12 1.20 0.21

.....
(Total for Question 9 is 1 mark)

- 10** Liz is watching a film at the cinema.
The film started at 14 30
The film is 105 minutes long.
When the film ends, Liz takes 20 minutes to get to the bus stop.
A bus leaves the bus stop at 16 45
Does Liz get to the bus stop in time to get this bus?
You must show all your working.

(Total for Question 10 is 3 marks)

11 (a) Solve $3m = 36$

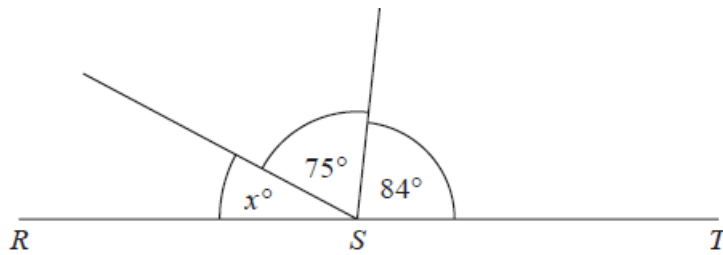
$m = \dots\dots\dots$
(1)

(b) Solve $7 - x = 3$

$x = \dots\dots\dots$
(1)

(Total for Question 11 is 2 marks)

12



RST is a straight line.

(i) Work out the value of x .

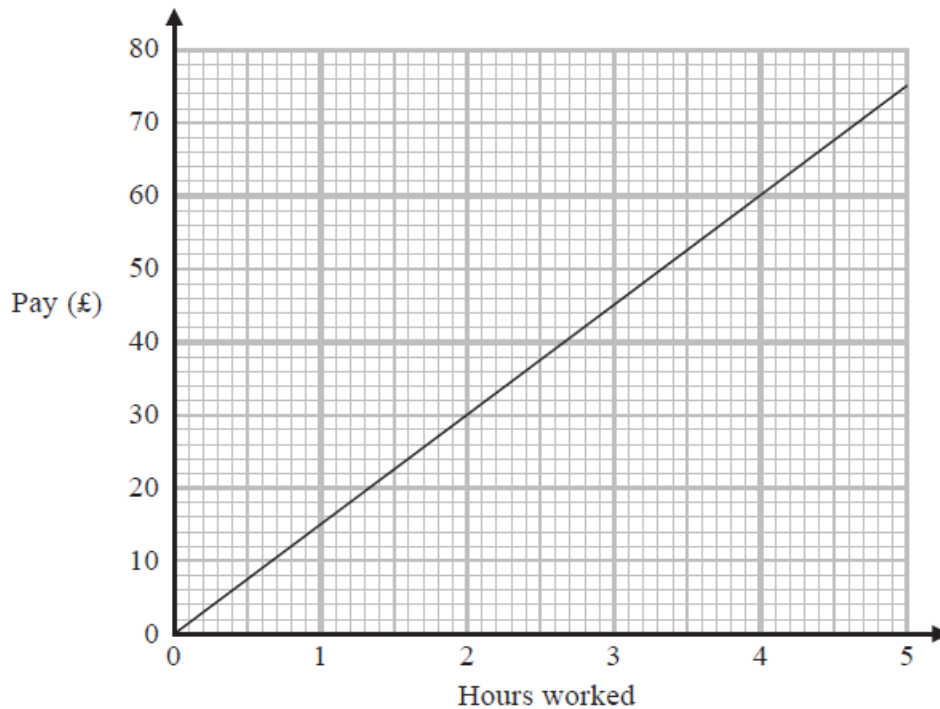
$\dots\dots\dots$
(2)

(ii) Give a reason for your answer.

$\dots\dots\dots$
 $\dots\dots\dots$
 $\dots\dots\dots$
(1)

(Total for Question 12 is 3 marks)

- 13 Nazima uses this graph to find out how much money she is paid for the number of hours she has worked.



- (a) How much money is Nazima paid for each hour she works?

£.....
(1)

Last week Nazima worked for 36 hours.

- (b) How much money was Nazima paid?

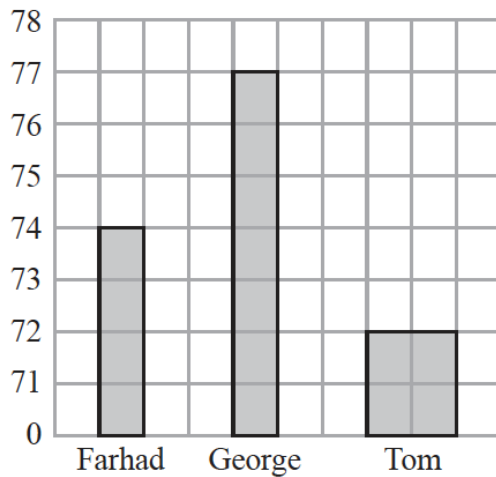
£.....
(2)

(Total for Question 13 is 3 marks)

- 14 Farhad, George and Tom each did a test.
Here are their marks for the test.

Farhad	74
George	77
Tom	72

George drew this bar chart to show the marks they got.
The bar chart is **not** fully correct.



Write down **two** things that are wrong with George's bar chart.

1.....
.....
.....

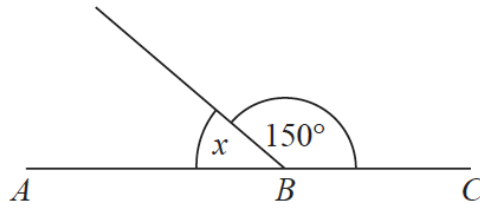
2.....
.....
.....

(Total for Question 14 is 2 marks)

- 15 Write 17 as a fraction of 30

.....
(Total for Question 15 is 1 mark)

16



ABC is a straight line.

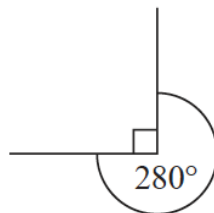
(a) (i) Work out the size of the angle marked x .

.....
(1)

(ii) Give a reason for your answer.

.....
.....
.....
(1)

The diagram below is wrong.



(b) Explain why.

.....
.....
.....
(1)

(Total for Question 16 is 3 marks)

17 (a) Work out $\sqrt{\frac{13.82}{4.06}}$

Write down all the figures on your calculator display.

.....
(2)

(b) Give your answer to part (a) correct to 2 decimal places.

.....
(1)
(Total for Question 17 is 3 marks)

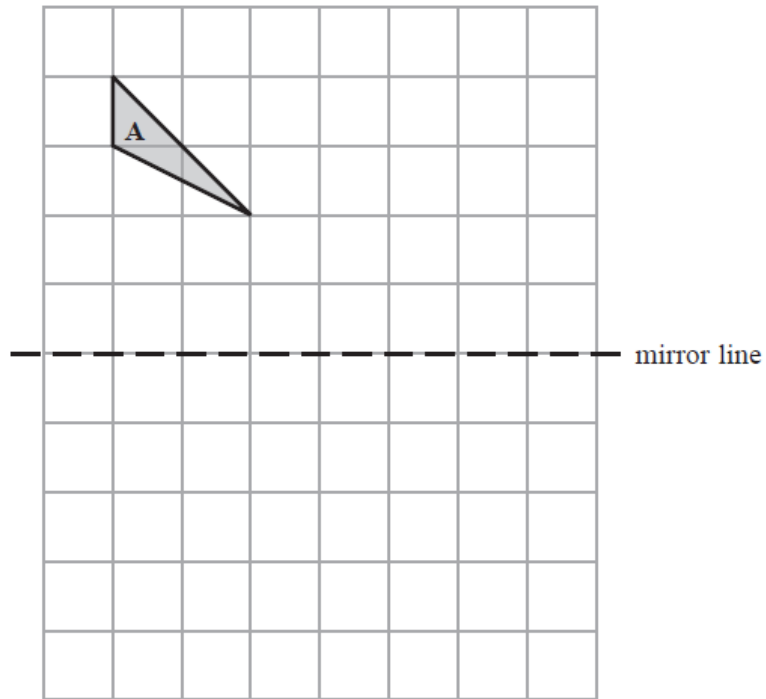
18 (a) Simplify $m + m + m + m$

.....
(1)

(b) Simplify $12p \div 4$

.....
(1)
(Total for Question 18 is 2 marks)

19 Reflect shape A in the mirror line.



(Total for Question 19 is 2 marks)

20 Simplify $3e - e + 4e$

.....
(Total for Question 20 is 1 mark)

21 Change 3 metres into centimetres.

..... centimetres
(Total for Question 21 is 1 mark)

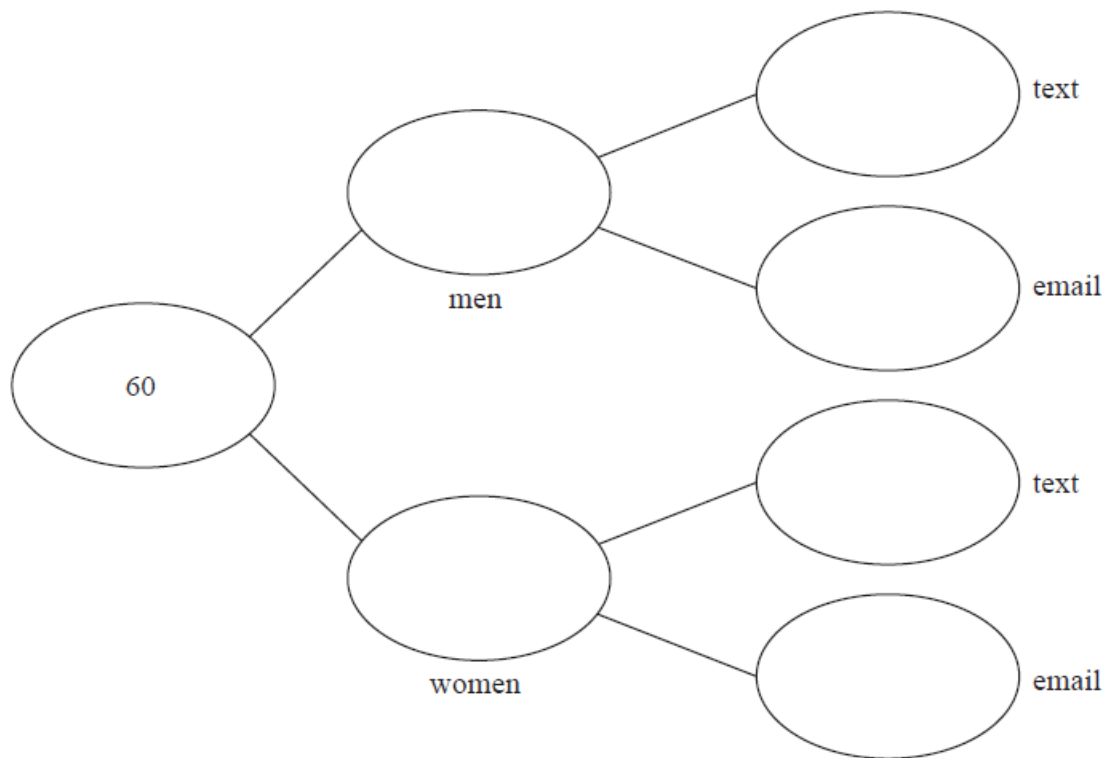
22 60 people are asked if they prefer to text or to email their friends.

38 of the people are women and the rest are men.

15 of the men prefer to email their friends.

60% of the people prefer to text their friends.

Complete the frequency tree for this information.



(Total for Question 22 is 5 marks)

- 23 Scott wants to make orange juice.
He is going to buy boxes of oranges.

There are 24 oranges in each box of oranges.
30 oranges make 2 litres of orange juice.

Scott needs to buy enough oranges to make 8 litres of orange juice.

- (a) Work out the number of boxes of oranges that Scott needs to buy.
You must show all your working.

.....
(3)

Scott also buys
1260 apples
280 bananas

- (b) Write down the ratio of the number of apples that Scott buys to the number of
bananas that he buys.
Give your ratio in its simplest form.

.....
(2)

(Total for Question 23 is 5 marks)

24 Write 29 381 correct to the nearest 1000

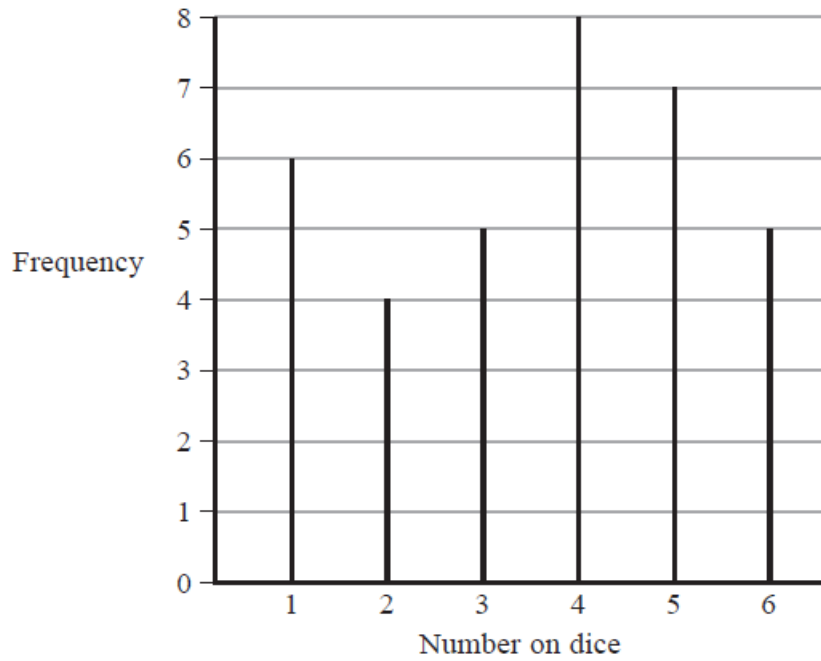
.....
(Total for Question 24 is 1 mark)

25 A machine fills bags with sweets.
There are 4275 sweets.
There are 28 sweets in each full bag.
The machine fills as many bags as possible.
How many sweets are left?

.....
(Total for Question 25 is 3 marks)

- 26 5 students throw a dice.
They each throw the dice the same number of times.

The diagram gives information about the number of times the dice lands on each number.



Work out how many times each student throws the dice.

.....
(Total for Question 26 is 3 marks)

27 $T = 3x + 4y$

(a) Work out the value of T when $x = 5$ and $y = -7$

.....
(2)

(b) Work out the value of y when $T = 38$ and $x = 6$

.....
(2)

(Total for Question 27 is 4 marks)

28 Here is a list of numbers.

3 4 9 18 27 30 36

From the numbers in the list, write down a cube number.

.....
(Total for Question 28 is 1 mark)

29 Rachel, Samina and Tom share £600 between them.

Rachel gets $\frac{2}{5}$ of the £600

Samina gets $\frac{1}{4}$ of the money that is left over.

Tom gets the rest of the money.

Tom says,

“I would have got more money if we had shared the £600 equally between us.”

Is Tom correct?

You must show how you get your answer.

(Total for Question 29 is 4 marks)

30 An exam has two papers, Paper 1 and Paper 2

Paper 1 has 60 marks.

Paper 2 has 90 marks.

The pass mark is $\frac{2}{3}$ of the total number of marks.

Danielle gets 70% of the marks for Paper 1

How many of the marks for Paper 2 must Danielle get in order to get the pass mark?

.....
(Total for Question 30 is 4 marks)

- 31 Write the following fractions in order of size.
Start with the smallest fraction.

$$\frac{5}{8} \quad \frac{2}{3} \quad \frac{4}{9} \quad \frac{3}{5}$$

.....
(Total for Question 31 is 2 marks)

- 32 (a) Simplify $c^5 \div c^2$

.....
(1)

- (b) Simplify $(d^4)^3$

.....
(1)

(Total for Question 32 is 2 marks)

33 (a) Find the Highest Common Factor (HCF) of 60 and 84

.....
(2)

(b) Find the Lowest Common Multiple (LCM) of 24 and 40

.....
(2)

(Total for Question 33 is 4 marks)

TOTAL FOR PAPER IS 40 MARKS