

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 2023 Practice Paper Time: 1 hour 30 minutes	Paper Reference 1MA1/2F
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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
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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 30 questions.
- Questions have been arranged in an ascending order of mean difficulty, as found by students achieving Grade 4 in the Summer and November 2022 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 questions.

Write your answers in the spaces provided.

You must write down all the stages in your working.

- 1** Write the following numbers in order of size.
Start with the smallest number.

-11 -2 8 -7 3 10

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

- 2** Write the following numbers in order of size.
Start with the smallest number.

-7 7 0 -2 -1

.....
(Total for Question 2 is 1 mark)

- 3** Write down a 3 digit number that is a multiple of 5

.....
(Total for Question 3 is 1 mark)

- 4** Write 37% as a fraction.

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

5 Write 0.4 as a percentage.

.....%

(Total for Question 5 is 1 mark)

6 Safiya wants to hire a van.
She uses this rule to work out the cost of hiring a van for a number of days.

$$\text{Cost} = \text{£}45 \times \text{number of days}$$

Safiya is going to hire the van for 7 days.
Work out the cost.

£.....

(Total for Question 6 is 2 marks)

- 7 The table shows information about the number of students who arrived late at school each day one week.

	Number of students
Monday	9
Tuesday	10
Wednesday	8
Thursday	6
Friday	3

On the grid, draw a bar chart for this information.



(Total for Question 7 is 3 marks)

- 8** Sonia wants to book a holiday.
The holiday will cost £1428
Sonia will pay a deposit of £150
She will then pay the rest of the cost in 6 equal monthly payments.
How much is each monthly payment?

£.....
(Total for Question 8 is 3 marks)

9 Sophie works in a bed shop.

During the last three months she sold 198 beds.

59 beds were sold without a mattress.

45 beds were double beds.

17 of the single beds were sold without a mattress.

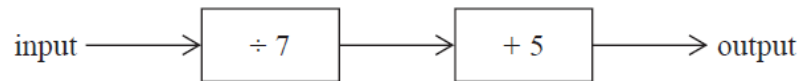
67 of the 83 king size beds were sold with a mattress.

Use this information to complete the two-way table.

	Single	Double	King size	Total
With mattress				
Without mattress				
Total				

(Total for Question 9 is 3 marks)

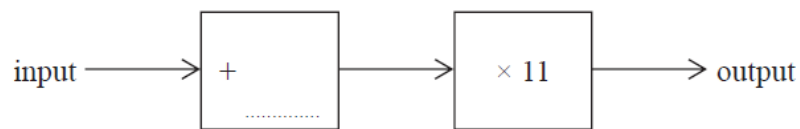
10 Here is a number machine.



(a) Work out the output when the input is 28

.....
(1)

Here is a different number machine.
The number machine is not complete.



When the input is 8, the output is 154

(b) Complete the number machine.

(2)

(Total for Question 10 is 3 marks)

11 Write 1476 to the nearest 10

.....
(Total for Question 11 is 1 mark)

- 12** 214 people go on a school trip.
The people on the trip are either adults or children.

There are 14 adults on the trip.
35% of the children on the trip are wearing a hat.

Find the number of children on the trip who are **not** wearing a hat.

.....
(Total for Question 12 is 4 marks)

- 13** (a) Work out $\frac{5}{8}$ of 132

.....
(2)

- (b) Write the following fractions in order of size.
Start with the smallest fraction.

$$\frac{3}{8} \quad \frac{9}{32} \quad \frac{1}{4} \quad \frac{21}{64}$$

.....
(2)
(Total for Question 13 is 4 marks)

14 Here is a list of numbers.

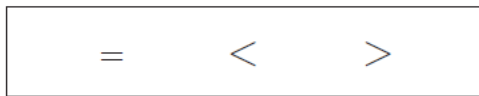
3 3 3 3 4 4 5 7 8

Write down the mode of the numbers.

.....

(Total for Question 3 is 1 mark)

15 The box below contains three mathematical symbols.



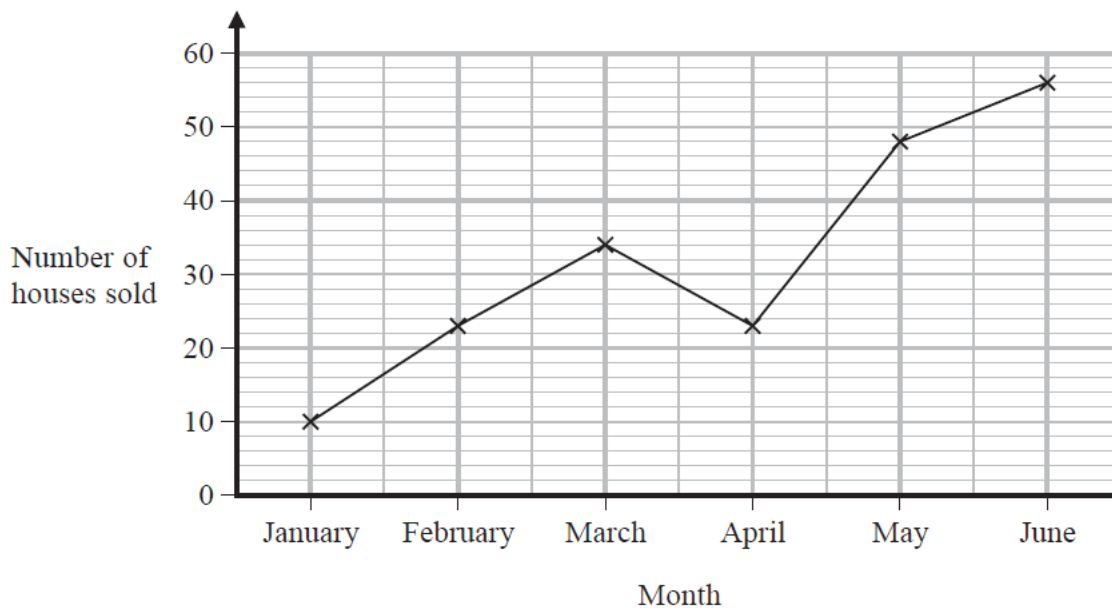
From the box, choose a symbol to make each of the following statements correct.

(i) $\frac{5}{8}$ $\frac{2}{8}$ **(1)**

(ii) -2×-3 $-3 + 9$ **(1)**

(Total for Question 15 is 2 marks)

- 16 The graph shows information about the number of houses sold by an estate agent in each of six months last year.



- (a) How many houses were sold by the estate agent in February?

.....

(1)

- (b) For this estate agent, write down the ratio of the number of houses sold in January to the number of houses sold in June.

.....

(2)

(Total for Question 16 is 3 marks)

17 Here is part of a bus timetable between Wigan and Bolton.

Wigan	07 20		07 40		07 55
Blackrod	07 49		08 09		08 24
Horwich	08 00	08 14	08 20	08 29	08 36
Lostock	08 09	08 20	08 29	08 37	08 44
Park Road	08 14	08 34	08 41	08 48	08 58
Bolton	08 32	08 51	08 58	09 05	09 15

(a) How many minutes should the 07 20 bus take to go from Wigan to Lostock?

..... minutes
(2)

Alison goes from Blackrod to Bolton by bus.
One day Alison leaves her house at 08 00

She takes 7 minutes to walk to the bus stop in Blackrod.
She takes 15 minutes to walk from the bus stop in Bolton to work.

Alison needs to be at work for 09 20

(b) Will Alison get to work for 09 20?

You must show how you get your answer.

(3)

(Total for Question 17 is 5 marks)

18 Write down the 7th odd number.

.....
(Total for Question 18 is 1 mark)

19 Write a fraction in the box to make the calculation correct.

$$1 - \frac{3}{10} \quad \boxed{\text{.....}}$$

(Total for Question 19 is 1 mark)

20 Myles writes down the distance readings from his car at the start and end of a journey.

Start of journey

1	2	4	6	8
---	---	---	---	---

 miles

End of journey

1	2	8	4	5
---	---	---	---	---

 miles

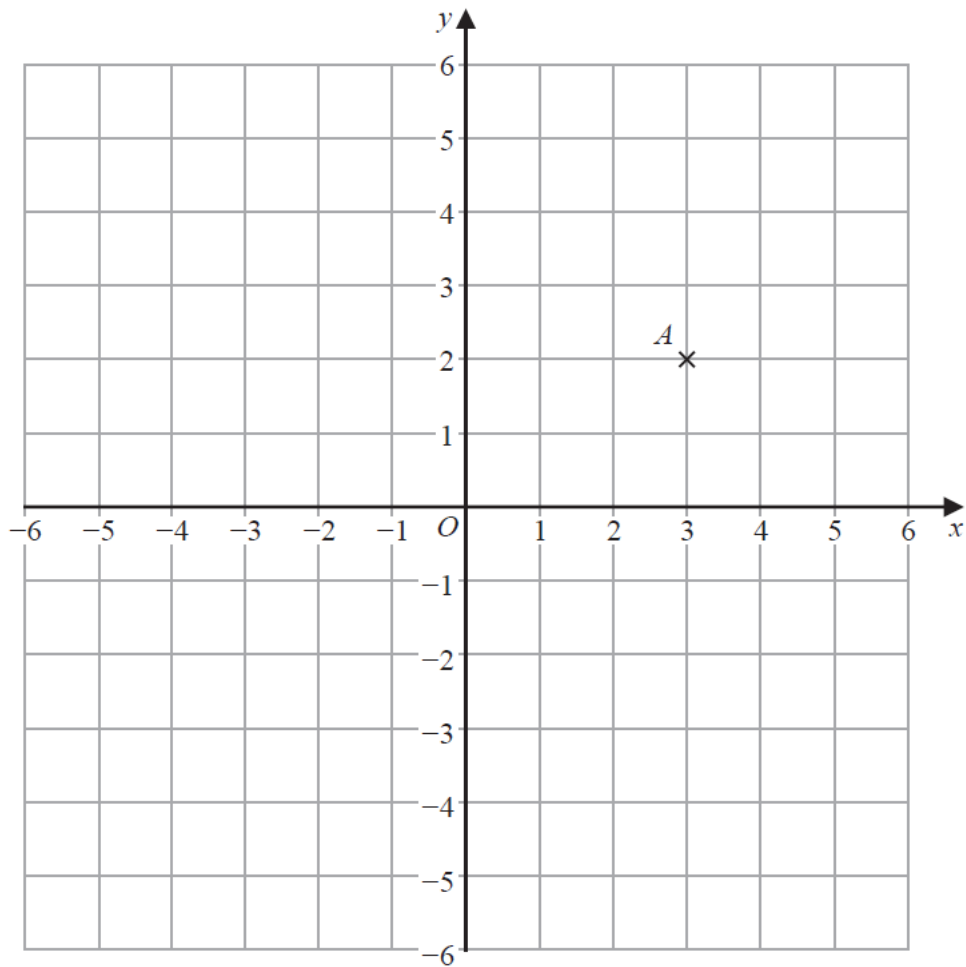
Myles knows that the cost of petrol for this journey is 13p per mile.

Work out the total cost of the petrol used for this journey.

Give your answer in pounds.

£.....
(Total for Question 20 is 4 marks)

21 Here is a centimetre grid.



(a) Write down the coordinates of point A .

(.....,)
(1)

(b) On the grid, mark with a cross (\times) the point with coordinates $(-4, 3)$
Label this point B .

(1)

(c) On the grid, draw the circle with
centre $(1, -1)$
and radius 4 cm.

(2)

(Total for Question 21 is 4 marks)

22 (a) Simplify $4c + 7d + 3c - d$

.....
(2)

(b) Solve $5(2m - 6) = 40$

$m =$
(3)

There are x sweets in a box.
There are y sweets in a packet.

(c) Write an expression, in terms of x and y , for the total number of sweets in 3 boxes and 2 packets.

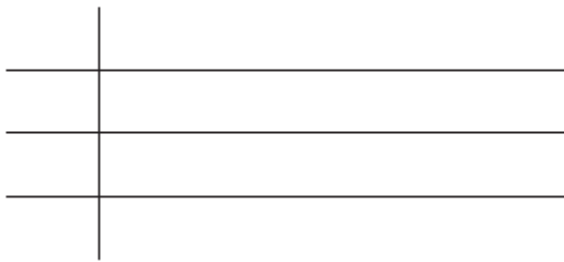
.....
(2)

(Total for Question 22 is 7 marks)

23 Hetvi asked her friends how many stickers they each have in their collection. Here are her results.

77	86	94	87	71	98
74	103	71	85	82	84
97	91	88	89	75	

(a) Show this information in a stem and leaf diagram.



Key:

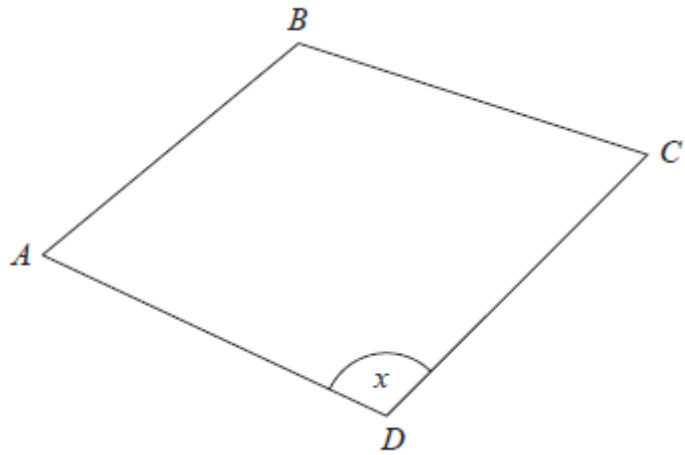
(3)

(b) Find the median number of stickers.

.....
(2)

(Total for Question 23 is 5 marks)

24 Here is a quadrilateral $ABCD$.



- (a) Measure the length of the side AB .
Give your answer in centimetres.

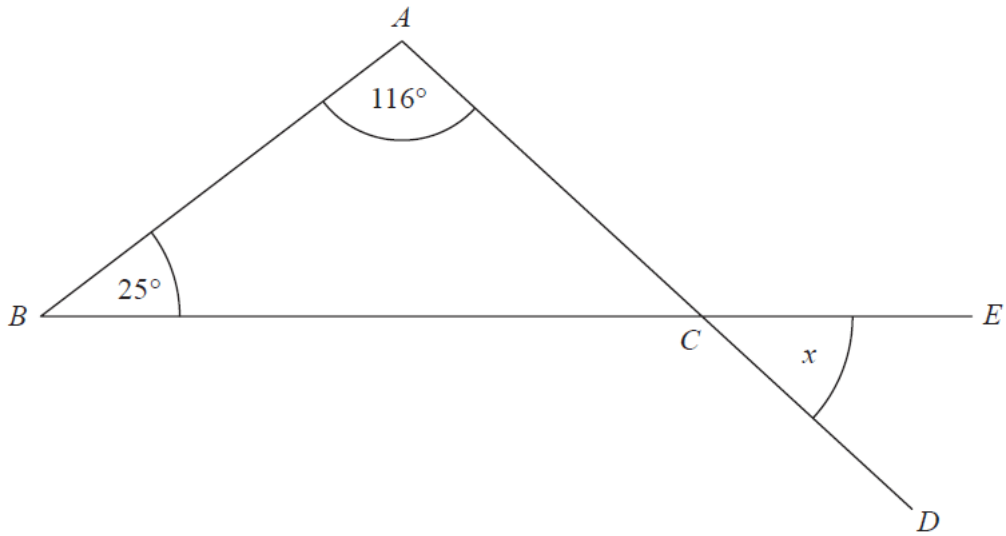
..... centimetres
(1)

- (b) Measure the size of the angle marked x .

.....^o
(1)

(Total for Question 24 is 2 marks)

25 The diagram shows a triangle ABC .



ACD and BCE are straight lines.

Work out the size of the angle marked x .

Give a reason for each stage of your working.

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

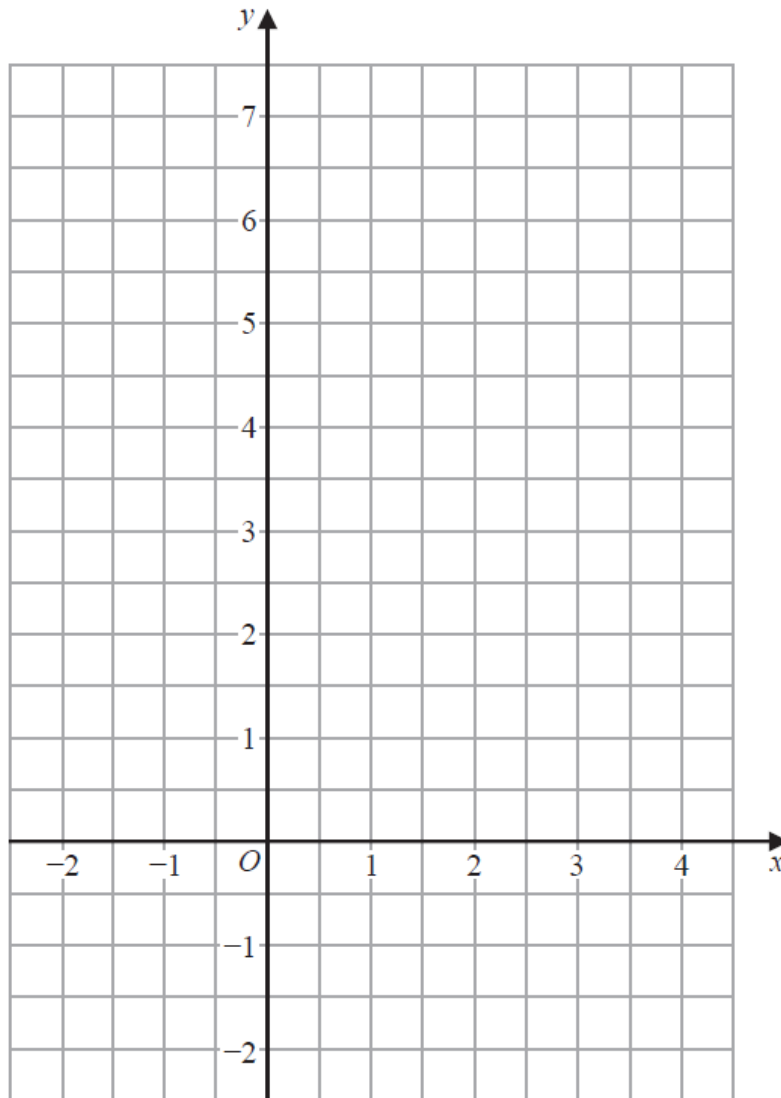
- 26 On a scale drawing, a building has length 12.4 cm and width 9.4 cm.
The real length of the building is 62 metres.

Work out, in metres, the real width of the building.

..... metres

(Total for Question 26 is 3 marks)

- 27 On the grid below, draw the graph of $y = 4 - x$ for values of x from -2 to 4



(Total for Question 27 is 3 marks)

28 Change 53 centimetres to millimetres.

..... millimetres

(Total for Question 28 is 1 mark)

29 In Spain, Sam pays 27 euros for 18 litres of petrol.
In Wales, Leo pays £40.80 for 8 gallons of the same type of petrol.

1 euro = £0.85
4.5 litres = 1 gallon

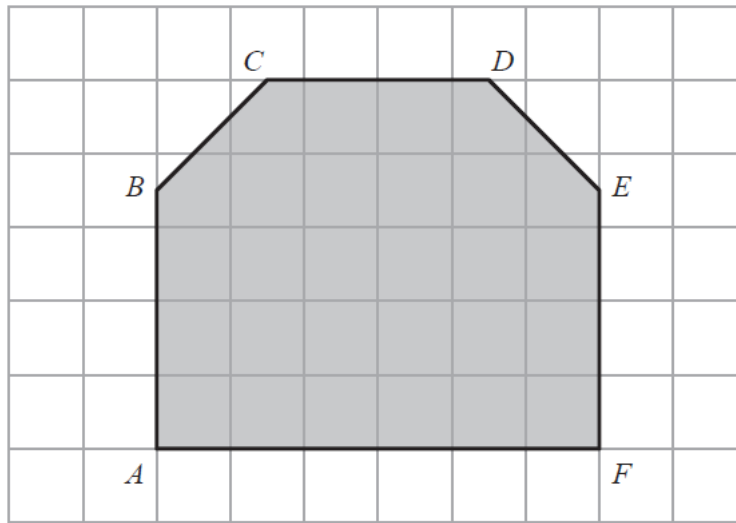
Sam thinks that petrol is cheaper in Spain than in Wales.

Is Sam correct?

You must show how you get your answer.

(Total for Question 29 is 4 marks)

30 Here is polygon $ABCDEF$ on a square grid.



(a) Write down the mathematical name of the polygon.

.....
(1)

(b) Which side of the polygon is parallel to the side CD ?

.....
(1)

(c) Write down a side of the polygon that is perpendicular to the side AF .

.....
(1)

(Total for Question 30 is 3 marks)

TOTAL FOR PAPER IS 80 MARKS