

Please check the examination details before entering your candidate information

Candidate Surname

Other Names

Centre Number

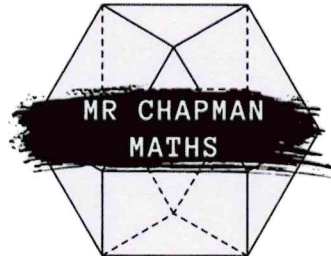
Candidate Number

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## Mathematics

GCSE  
Foundation Tier  
Paper 1



Marks:  
/80

## Best Guess Paper 2 2026

### 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.
- You may use a calculator on this paper.

### IMPORTANT NOTE

This paper has been compiled based on topics we frequently see on GCSE Maths papers.

This is **NOT** a prediction for your papers- nobody can accurately predict a GCSE exam and anybody claiming to do so is lying to you.

This paper is intended to be useful revision and I hope you find it helpful.

Write your answers in the spaces provided.  
You must write down all the stages in your working.

1. a. Write 7% as a decimal.

0.07  
.....  
(1 mark)

b. Write 0.625 as a fraction in its simplest form

5/8  
.....  
(2 mark)

Total for question: 3 marks

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2. Gemma usually buys a carton of pineapple juice that is 400 ml.  
She buys a special edition that contains an extra 35%.  
How many millilitres of juice are in the special edition of the carton?

$$35\% \text{ of } 400 = 140$$
$$400 + 140 = 540$$

540ml  
.....  
(3 marks)

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3. Arrange these measurements in order, from smallest to largest.

1.2 kg, 5 kg, 800 g, 90g, 0.6 kg

↓        ↓        ↓        ↓

1200g   5000g        800g   600g

90g, 0.6kg, 800g, 1.2kg, 5kg

.....  
(2 marks)

4. A café has the following items on the menu, alongside their costs:

MENU	
Sandwich	£2.95
Panini	£3.75
Crisps	85p
Tea	£1.50
Coffee	£2.10
Can of Soda	90p

a. Devon buys seven cups of coffee and three cups of tea. How much does this cost in total?

$$\text{coffee: } 7 \times 2.10 = \text{£}14.70$$

$$\text{Tea: } 3 \times 1.50 = \text{£}4.50$$

$$\text{Total} = \text{£}19.20$$

(2 marks)

b. Patrick has a £5 note and three 50p coins. He buys a panini, a packet of crisps, and a can of soda. How much change does he receive?

$$\text{He has } \text{£}6.50.$$

$$3.75 + 0.85 + 0.9 = \text{£}5.50.$$

$$6.50 - 5.50 = \text{£}1.$$

(3 marks)

Total for question: 5 marks

5. Lucas scores 28 out of 45 on his music assessment. Give his score as a percentage, to one decimal place.

$$\frac{28}{45} \times 100 = 62.222\text{---}$$

$$62.2\%$$

(2 marks)

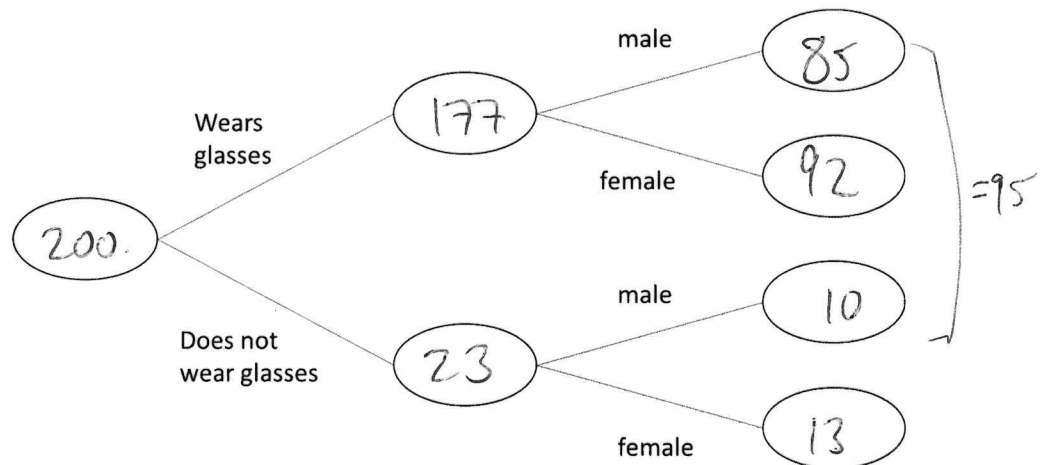
6. There are 200 pupils in Year 7.

23 pupils do not wear glasses.

10 male pupils do not wear glasses.

95 of the pupils are male.

Use this information to complete this frequency tree.



(3 marks)

7. A box contains blue counters and green counters only.

20% of the counters are blue.

Write the ratio of blue to green counters as a ratio in its simplest form.

$$\begin{array}{l} 20:80 \\ \downarrow \\ 2:8 \end{array}$$

$$\begin{array}{l} 1:4 \\ \dots\dots\dots \end{array}$$

(2 marks)

8. Work out  $\frac{2}{3}$  of 103, giving your answer correct to 1 decimal place.

$$\begin{array}{l} 68.7 \\ \dots\dots\dots \end{array}$$

(2 marks)

9. Use your calculator to work out the value of

$$\frac{5.21 + 6.37}{9.8} + 8.3^2$$

Write down all of the figures on your calculator display.

70.07163265

(2 marks)

10. Simplify:

a.  $f + f + f + f + f$

5f

(1 mark)

b.  $8y + 2z - 2y + 4z$

6y + 6z

(1 mark)

c.  $t^4 + t^4$

2t<sup>4</sup>

(1 mark)

Total for question : 3 marks

11. A car travels 90 miles in 2 hours 30 minutes. What is the average speed of the car, in miles per hour?

d	t
90	2h30m
180	5h
36	1h

36 mph

(2 marks)

12. a. Write 7,450,000,000 in standard form.

$$\underline{7.45 \times 10^9}$$

(1 mark)

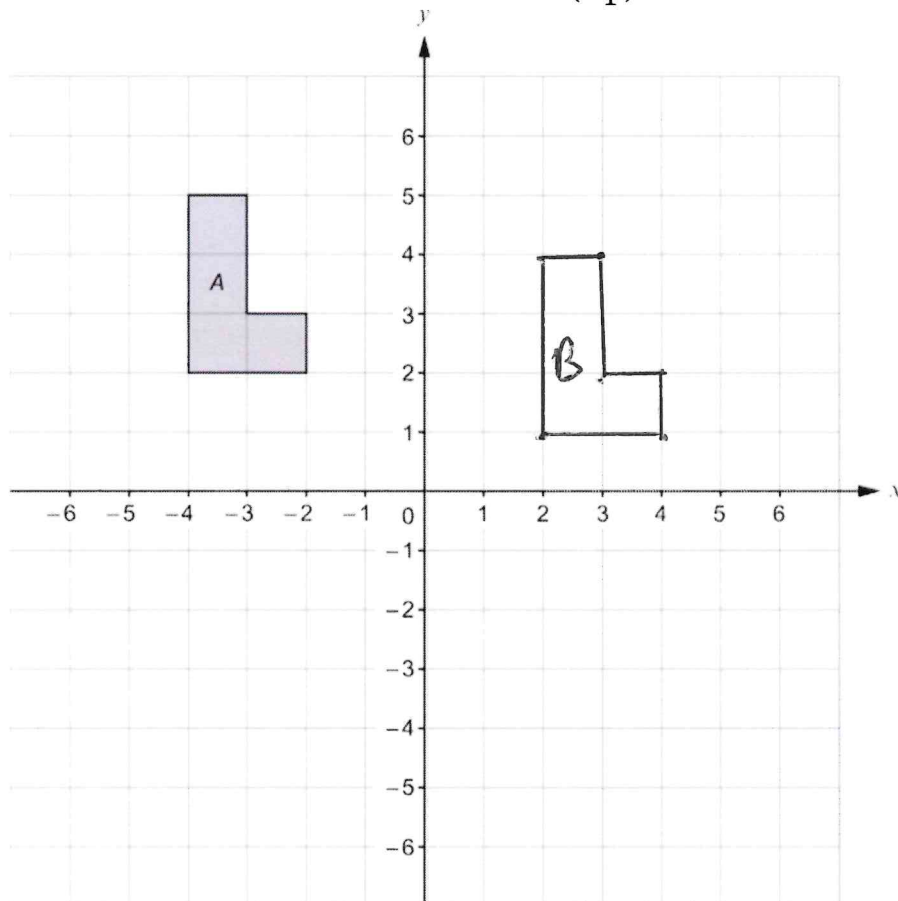
b. Write  $2.5 \times 10^{-4}$  as an ordinary number.

$$\underline{0.00025}$$

(1 mark)

Total for question: 2 marks

13. On the grid below, translate Shape A by the vector  $\begin{pmatrix} 6 \\ -1 \end{pmatrix}$  and label it B.



(2 marks)

14. Find the highest common factor (HCF) of 63 and 105

<u>63</u>	<u>105</u>
1    63	1    105
<del>3</del> 21	3    35
<u>7</u> 9	5    21
	<del>7</del> 15

7

.....  
(2 marks)

15. Solve

a.  $\frac{y}{8} = -6$

$y = \frac{-48}{8}$   
.....  
(1 mark)

b.  $25 - x = 18$

$x = \frac{7}{1}$   
.....  
(2 mark)

c.  $5(2f - 1) = 6f + 9$

$10f - 5 = 6f + 9$

$4f = 14$

$f =$

$(\frac{7}{2} \text{ or } 3.5)$

$f = \frac{3.5}{1}$   
.....  
(3 marks)

Total for question : 6 marks

16. Roberto runs a fruit stand and he sells strawberries in boxes.

This frequency table shows the number of strawberries that are in 130 boxes.

Number of strawberries	Frequency
15	7
16	24
17	35
18	37
19	18
20	9

105

384

595

666

342

180

Calculate the mean number of strawberries in a box

$$\frac{(15 \times 7) + (16 \times 24) + (17 \times 35) + (18 \times 37) + (19 \times 18) + (20 \times 9)}{130}$$

17.5

.....  
(3 marks)

17. Simplify

a.  $y^{15} \div y^3$

$y^{12}$

.....  
(1 mark)

b.  $(m^8)^6$

$m^{48}$

.....  
(1 mark)

c.  $8 \times (4t)^0$

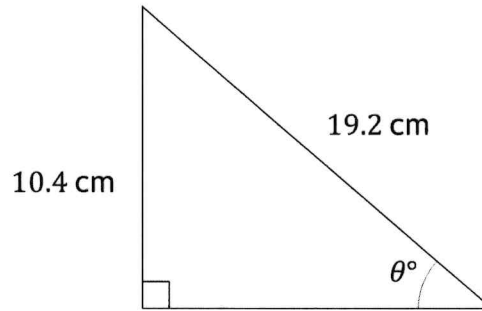
$= 8 \times 1$

8

.....  
(2 marks)

Total for question: 4 marks

18. Shown is a right-angled triangle



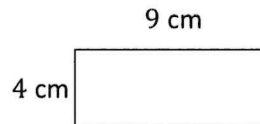
Work out the size of angle  $\theta$ , giving your answer to 1 decimal place.

$$\sin^{-1} \left( \frac{10.4}{19.2} \right)$$

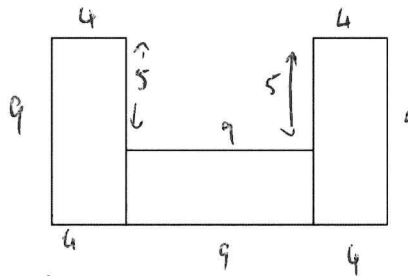
$$32.8^\circ$$

.....  
(2 marks)

19. The diagram shows a rectangle measuring 4 cm by 9 cm.



A shape is made by combining 3 of these rectangle as shown below



Work out the perimeter of the shape.

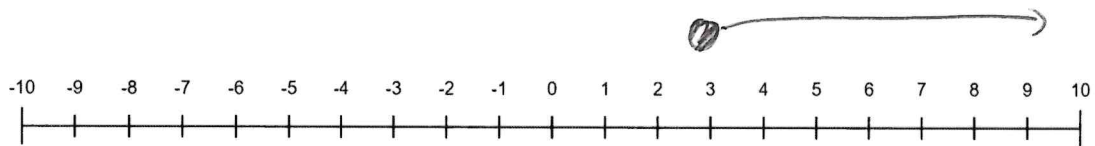
$$62 \text{ cm}$$

.....  
(3 marks)

20. Solve  $2x + 5 \geq 11$  and represent your solution on the number line below

$$2x \geq 6$$

$$x \geq 3$$



(4 marks)

21. In a village

the number of houses and the number of flats are in the ratio 7 : 4

the number of flats and the number of bungalows are in the ratio 8 : 5

There are 50 bungalows in the village.

How many houses are there in the village?

$$\begin{aligned} f &= b \\ 8 &= 5 \\ 80 &= 50 \end{aligned}$$

$$\begin{aligned} h &= f \\ 7 &= 4 \\ 140 &= 80 \end{aligned} \downarrow \times 20.$$

$$\boxed{140}$$

(3 marks)

22. Tabitha buys a new car for £35,000

The value of the car depreciates by 20% by the end of the first year.

It then depreciates by 12% at the end of every year after that.

Work out the value of the car by the end of 3 years.

$$\text{Yr 1: } 35000 \times 0.8 = 28000$$

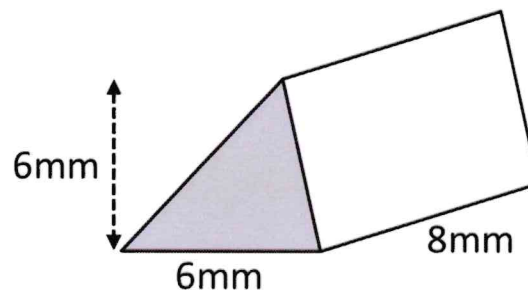
$$\text{Yr 2: } 28000 \times 0.88 = 24640$$

$$\text{Yr 3: } 24640 \times 0.88 = 21683.20$$

£21683.20

(3 marks)

23. Find the volume of the triangular prism shown below.



$$A_A = \frac{1}{2} \times 6 \times 6 = 18 \text{ mm}^2$$

$$V = 18 \times 8 = 144$$

144 mm<sup>3</sup>

(3 marks)

24. The first two terms of a Fibonacci sequence are

$$a, b \quad \underline{a+b} \quad \underline{a+2b} \quad \underline{2a+3b}$$

Find the fifth term in this sequence.

$$\underline{2a+3b}$$

(3 marks)

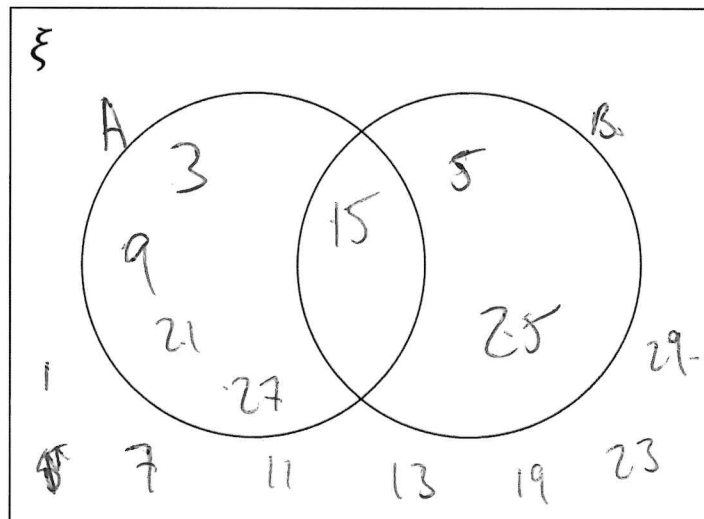
25.

$\xi = \{\text{Odd numbers less than 30}\}$  ~~1, 3, 5, 7, 9, 11, 13, 15, 17, 19, 21, 23, 25, 27~~

$A = \{3, 9, 15, 21, 27\}$

$B = \{5, 15, 25\}$

a) Complete the Venn Diagram to show this information



b) A number is chosen at random from the universal set  $\xi$ .  
What is the probability the number is in the set  $A \cup B$ .

$$\underline{7/15}$$

..... (2 marks)  
Total for question : 6 marks

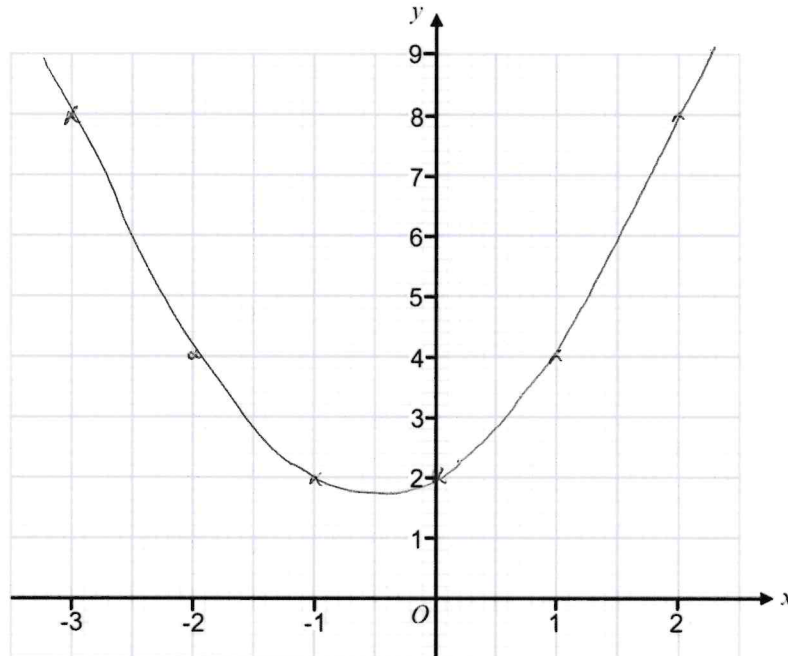
26.

a. Complete the table  $y = x^2 + x + 2$

$x$	-3	-2	-1	0	1	2
$y$	8	4	2	2	4	8

(2 marks)

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



(2 marks)

c. Write down an estimate for the co-ordinate of the turning point of this graph.

$(-0.5, 1.8)$

(1 mark)

**TOTAL FOR PAPER IS 80 MARKS**