SOLUTIONS

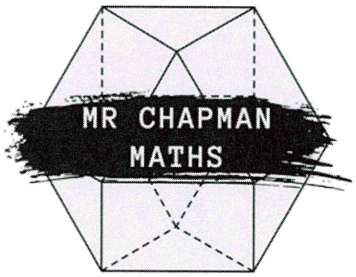
Please check the examination details before entering your candidate information

Candidate Surname	Other Names

Centre Number	Candidate Number

Mathematics

GCSE
Foundation Tier
Paper 1



Marks:
/80

Best Guess Paper 1 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.
- **Calculators may not be used 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. Round 4528 to the nearest 100.

4500

(1 mark)

2. Write these numbers in order of size, starting with the smallest number.

0.92 0.901 0.99 0.099 0.909

0·099, 0·901, 0·909, 0·92, 0·99

(1 mark)

3. Convert 4500 grams into kilograms.

4·5 kg

(1 mark)

4. Given that $42 \times 35 = 1470$, write down the value of:

a. 4.2×350

1470

(1 mark)

b. $1470 \div 350$

4·2

(1 mark)

5. Simplify $3x + 4y - x + 2y$

2x + 6y

(2 marks)

6. Write 0.6 as a fraction in its simplest form.

$\frac{6}{10}$ → $\frac{3}{5}$

.....

(2 marks)

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7. Here is a list of numbers.

$$12, 15, 17, 21, 24, 25$$

From the list, write down:

a. A prime number.

17 (only)

.....

(1 mark)

b. A multiple of 8.

24 only

.....

(1 mark)

c. A factor of 45.

15 only.

.....

(1 mark)

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8. Work out $\frac{3}{5}$ of 40.

$\frac{1}{5}$ of $40 = 8$. (1)

$\frac{3}{5}$ of $40 = 8 \times 3 = 24$.

24.

.....

(2 marks)

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9. Use the formula $v = u + at$ to work out the value of v when $u = 30$, $a = -3$ and $t = 4$.

$v = 30 + (-3) \times (4)$.

$= 30 - 12$

18.

.....

(2 marks)

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10. A train leaves Manchester at $08:45$ and arrives into Hitchin at $11:15$.
An adult ticket costs £42.50. A child ticket is half the price of an adult ticket.
Amelie buys an adult ticket and two child tickets.

a. How long is the journey in minutes?

15 + 120 + 15

150

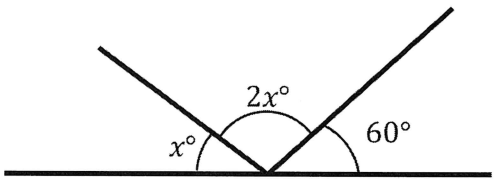
(1 mark)

b. How much does Amelie spend on tickets in total?

£85

(2 marks)

11. Three angles are on a straight line: x, $2x$, and $60°$.



Work out the value of x.

$3x = 120$

$x = 40$

$x = 40$

(3 marks)

12. Work out 15% of 120.

10% = 12

5% = 6

15% = 18

18

(2 marks)

13. Factorise $5x + 35$

$5(x+7)$

(1 mark)

14. Solve $4y - 3 = 57$

$4y = 60$

$y = 15$

(2 marks)

15. Work out:

a. $\frac{3}{4} - \frac{7}{10}$

$= \frac{30}{40} - \frac{28}{40} = \frac{2}{40}$ or $\frac{1}{20}$

(2 marks)

b. $1\frac{5}{6} \times \frac{2}{9}$

$= \frac{11}{6} \times \frac{2}{9} = \frac{22}{54}$ or $\frac{11}{27}$

(2 marks)

c. $\frac{7}{8} \div \frac{3}{4}$, giving your answer as a mixed number in its simplest form.

$= \frac{7}{8} \times \frac{4}{3} = \frac{28}{24} = 1\frac{4}{24}$ or $1\frac{1}{6}$

$1\frac{1}{6}$ only $1\frac{28}{24}$ or equivalent

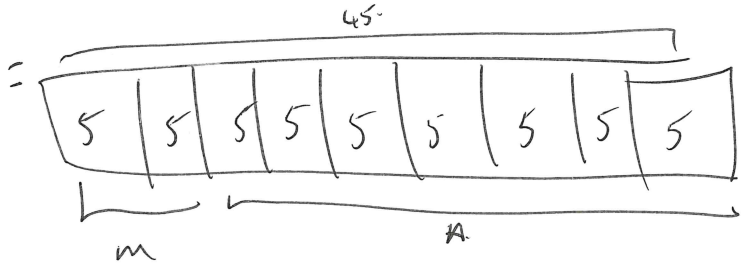
(2 marks)

Total for question : 6 marks

$\frac{14}{12}$

$\frac{7}{6} = 1\frac{1}{6}$

16. Alice and Misha share £45 in the ratio 2:7
How much <u>more</u> does Misha get than Alice?



£10 £35

difference = 35 − 10 = 25

£25

(3 marks)

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17. A bag contains red, blue, and green counters only. The probability of choosing each colour is as shown in the table.

Colour	Red	Blue	Green
Probability	0.3	0.5	0.2

a. Work out the probability of choosing a green counter.

0.2

(1 mark)

b. There are 60 counters in the bag in total. How many blue counters are there?

30

(2 marks)

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18. A car travels 120 miles in 2 hours 30 minutes. Calculate the average speed of this car in miles per hour.

d	t
120	2h 30m.
240	5h.
48	1hr.

48 mph

(3 marks)

19. Rufus the dog barks every 9 seconds. Barnaby the cow moos every 12 seconds. They both make a sound at the same time.
After how many seconds do they next make a sound at the same time?

9x: 9 18 27 36 45

12x: 12, 24 36.

36 seconds later

(2 marks)

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20. Granny Alison's chilli con carne has the following recipe:

Chilli Con Carne

Serves 6 people

- **1 *kg beef mince***
- **400 *g chopped tomatoes***
- **3 *red chillies***
- **600 *g kidney beans***

Her son wants to use the recipe to make chilli for 15 people.

a. Work out how much of each ingredient he will need to use.

3 people ×5 15 people

500g mince. 2500g mince.

200g tomatoes 1000g tomatoes

1.5 chillis. 7.5 red chillis

300g beans 1500g kidney beans

2500g or 2.5kg beef mince

1000g or 1kg chopped tomatoes

7.5 red chillies

1500g or 1.5kg kidney beans

(3 marks)

b. Granny Alison uses 4.8 kg of chopped tomatoes. How many people is she making chilli for?

4800 ÷ 400

= 48 ÷ 4 = 12.

12 x 6 = 72.

72 people

(2 marks)

21. This table shows the goals scored by Stevenage football club in the last 38 games.

Goals	Frequency
0	7
1	14
2	11
3	6
4 or more	0

a. Find the median number of goals scored.

1

(1 mark)

b. Write down the mode.

1

(1 mark)

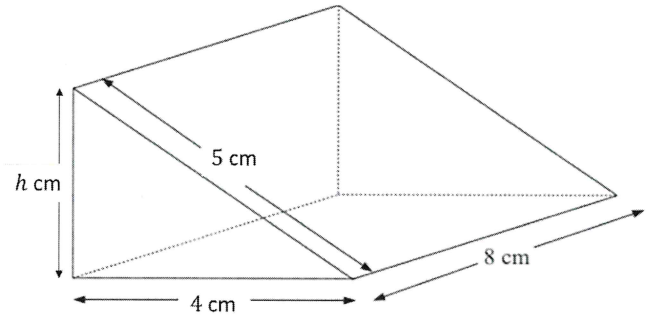
c. Write down the total number of goals scored across the 38 games.

0×14×22+16

54

(2 marks)

22. A solid prism is shown in the diagram below.
The cross-section is a right-angled triangle.



a. Find the height of the triangle, h.

3cm.

(2 marks)

b. Calculate the volume of the prism.

$\frac{1}{2} \times 3 \times 4 = 6\,cm^2$

$6 \times 8 =$ 48. cm^3

(3 marks)

23. Solve the equation:

$$3(2x - 1) = 4x + 9$$

$6x - 3 = 6x + 9$

$2x - 3 = 9$

$2x = 12$

$x = 6$

$x = 6$

(3 marks)

24. There are 200 people in a cinema.

$\frac{1}{4}$ of the people in the cinema are adult men.

30% of the cinema are adult women.

The rest of the people are children.

The children are made up of boys and girls in the ratio 4: 5

How out how many girls are there in the cinema.

Men = 50 people.

Women = 60 people.

90 children

40 boys, 50 girls

50

(4 marks)

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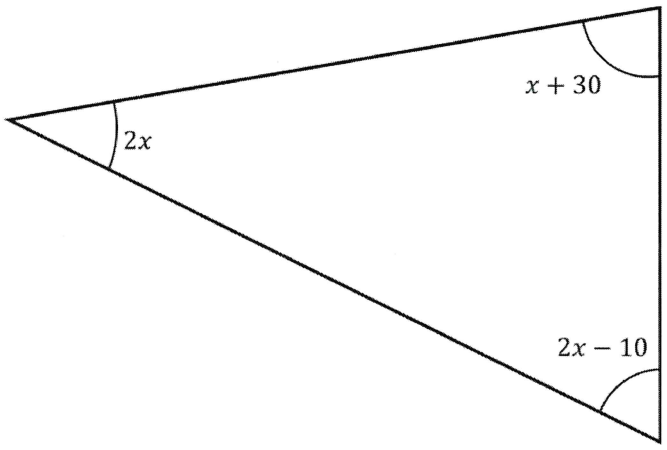
25. The three angles in a triangle are $2x$, $x + 30$, and $2x - 10$ as shown in the diagram.



Work out the value of x and use it to state the three angles of the triangle.

$2x + x + 30 + 2x - 10 = 180$

$5x + 20 = 180$

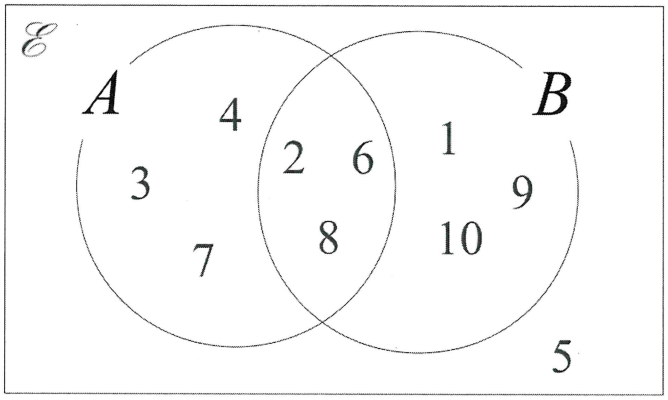
$5x = 160$

$x = 32$.

angles are 64°, 54°, 62°

(4 marks)

26. A number is chosen at random from the universal set, $\mathscr{E}$.



a. What is the probability the number is in the set $A \cup B$?

9/10

(2 marks)

b. What is the probability the number is in the set B' ?

4/10

(2 marks)

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27. Solve the simultaneous equations

$$3x - 3y = 9$$
$$2x + y = 12$$

(×3)

$6x + 3y = 36$.

$+ \quad 3x - 3y = 9$

$9x = 45$

$x = 5$

$2(5) + y = 12$

$10 + y = 12$.

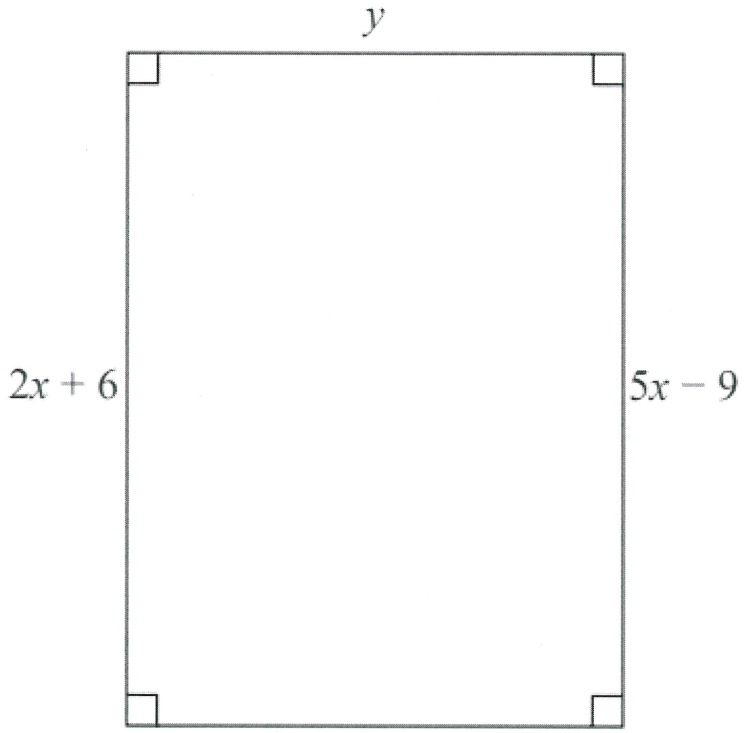
$y = 2$.

$x =$ 5

$y =$ 2

(3 marks)

28. Here is a rectangle



All measurements are in cm.

The area of the rectangle is 48 cm^2.

Show that $y = 3$.

$2x + 6 = 5x - 7$

$3x = 15$

$x = 5$.

$(2x+6) \times y = 48$.

$x = 5$

$(2 \times 5 + 6) \times y = 48$.

$16 \times y = 48$.

$y = 48/16 = 3$.

(4 marks)

TOTAL FOR PAPER IS 80 MARKS