Please check the examination details before entering your candidate information

Candidate Surname	Other Names

Centre Number | Candidate Number

Mathematics

GCSE
Foundation Tier
PAPER 3

Marks:
/80

Best Guess June 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 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 Arrange these numbers in order of size. Start with the smallest number.

3.81 3.49 3.9 3.007 3.1 3.107

3·007, 3·1, 3·107, 3·49, 3·81, 3·9

(Total for question is 2 marks)

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2 Look at the numbers in this box:

21	22	23
24	25	26
27	28	29

Using the numbers in this box, write down:

a. A multiple of 4

24 (1)

b. A prime number

29 (1)

c. A square number

25 (1)

d. A cube number

27 (1)

(Total for question is 4 marks)

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3 Simplify fully

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

$3x + 7y$

(2 marks)

4. Use the following symbols to complete the empty boxes below.

< > =

2.8 litres [=] 2800 ml

900 g [>] 0.8 kg

3090 mm [<] 3.1 m

(3 marks)

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5. The timetable below shows the times of trains between Hitchin and Baldock

Hitchin	06:30	06:50	07:20	07:45
Royston	07:03	07:15	07:51	08:10
Baldock	08:24	08:35	09:20	09:40

a. Rose arrives at Hitchin station at 06:58 and takes the next train to Royston. At what time does the train she takes leave Hitchin?

07:20 **(1 mark)**

b. The 07:45 train from Hitchin leaves 11 minutes late and doesn't make up any time. What time will this train arrive in Baldock?

09:51 **(1 mark)**

c. Which train is scheduled to take the least time to travel from Hitchin to Baldock?

1: 1h 54m
2: 1h 45m
3: 2h
4 1h 55m

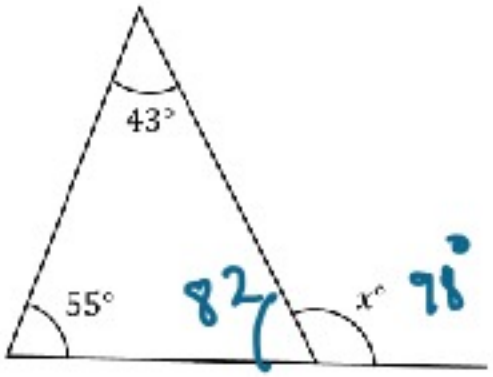
The 06:50 train

(2 marks)

(Total for question is 4 marks)

6. Find the size of the angle $x°$.

55
+43
98



98°

.....

(2 marks)

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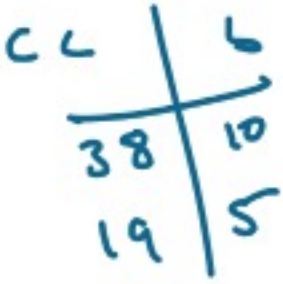
7. There are custard creams and bourbons in a biscuit tin, and no other biscuits.
If there are 48 biscuits in total and 10 of them are bourbons, write the ratio of custard creams to bourbons in its simplest form.



19:5

.....

(3 marks)

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8. Work out $\frac{3}{7}$ of 1330 ml.

570 ml

.....

(2 marks)

9. Solve

a. $6x - 19 = 5$

$6x = 24$

$x = 4$

.....

(2 marks)

b. $\frac{x}{10} + 6 = 5$

$\frac{x}{10} = -1$

$x = -10$

$x = -10$

.....

(2 marks)

c. $44 = 58 - 8g$

$8g + 44 = 58$

$8g = 14$

$g = 14/8$

$g = 1.75$

.....

(2 marks)

Total for question: 6 marks

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10. In a sale, a lamp costs £44.10.
This is a reduction of 10% of the normal price.

Calculate the price of the lamp before the sale.

90% | 44.10

10% | 4.90

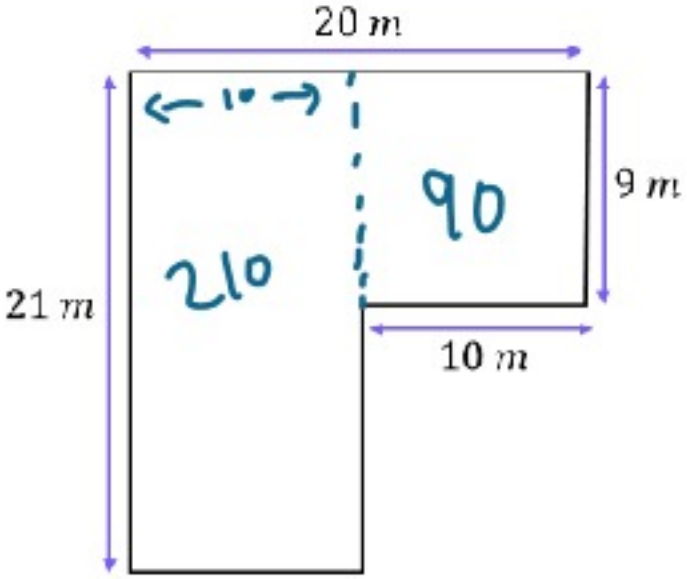
100% | 49

49

£.....

(3 marks)

11. Below shows the plan of a primary school playground



The school caretaker is going to lay tarmac across the whole playground.
Tarmac costs £3.12 per square metre.
Work out the total cost of the tarmac the caretaker needs.

Area = 300m²

× 3.12

= £936

..... **(4 marks)**

12. Use your calculator to work out

$$\frac{91^2 - 3.9}{\sqrt{162 - 4.5^3}}$$

a. Write down every figure on your calculator display.

983.1769002

(1 mark)

b. Write your answer to 3 significant figures.

983

(1 mark)

Total for question: 2 marks

13. The table below shows the ages of children that attend a youth group.

Age (years)	Frequency
12	4
13	7
14	8
15	6

a. Write down the modal age at the youth group.

14

(1 mark)

b. Work out the range of the ages of people that attend the youth group.

15 - 12 3

(1 mark)

c. Calculate the mean age

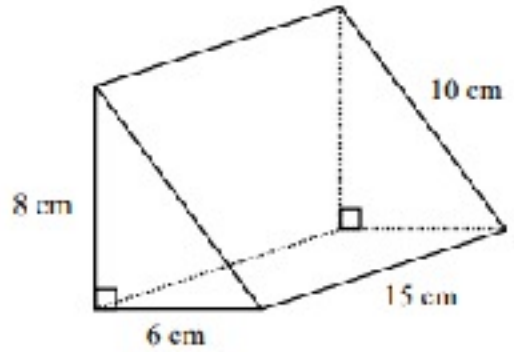
$$\frac{(12 \times 4) + (13 \times 7) + (14 \times 8) + (15 \times 6)}{4 + 7 + 8 + 6}$$

13.64

(2 marks)

Total for question: 4 marks

14. Shown below is a prism



a. Calculate the volume of this prism, stating units in your answer.

Area of $\Delta = \frac{8 \times 6}{2} = 24\ cm^2$

$V = 24 \times 15 = 360 cm^3$

$360 cm^3$

.....

(3 marks)

b. Calculate the surface area of this prism, stating units in your answer.

$\Delta = \frac{8 \times 6}{2} = 24 \times 2 = 48$

Base $6 \times 15 = 90$

Rear $8 \times 15 = 120$

Slope $10 \times 15 = 150$

Total

$48 + 90 + 120 + 150$

$408 cm^2$

.....

(4 marks)

Total for question: 7 marks

15. Solve the simultaneous equations

$$4x + 3y = 18$$
$$x - 3y = 7 \quad +$$

$5x = 25$

$x = 5$

$20 + 3y = 18$

$3y = -2$

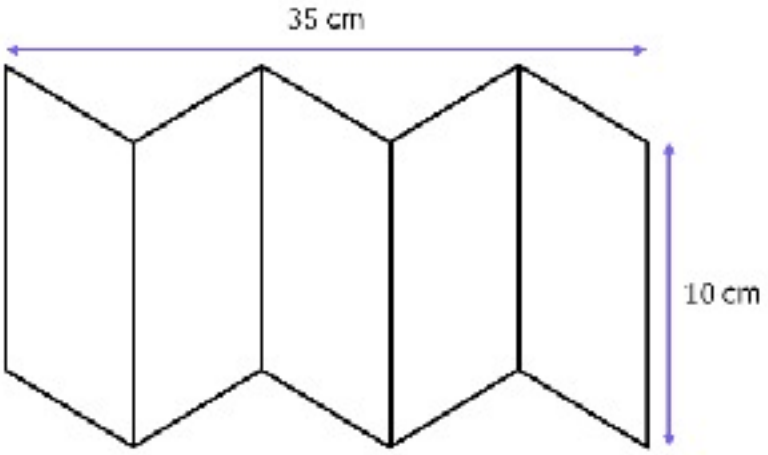
$y = -2/3$

$x =$ 5

$y =$ $-2/3$

(4 marks)

16. The diagram below shows a design made up of 5 congruent parallelograms.



Find the area of a one of these parallelograms.

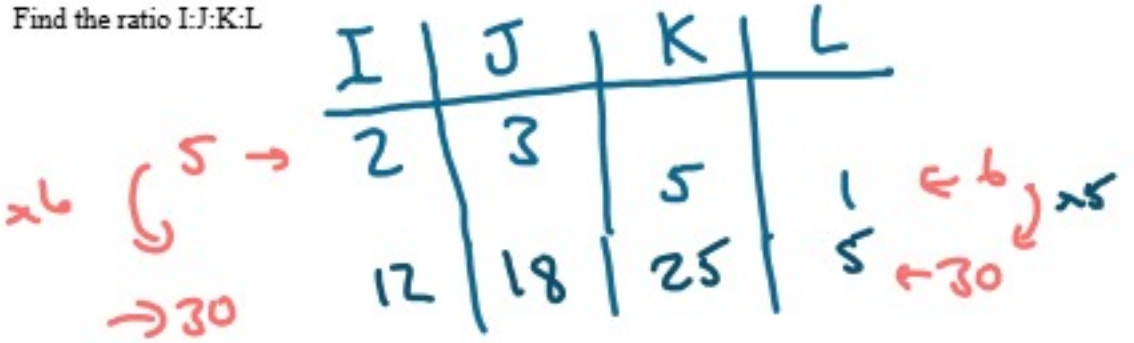
5×10

50 cm^2

(3 marks)

17. Inigo and Julian share some money in the ratio 2: 3
Inigo gets £I and Julian gets £J
Kingsley and Lorenzo share the same amount of money, in the ratio 5: 1
They share their money in the ratio 5:1
Kingsley gets £K and Lorenzo gets £L

Find the ratio I:J:K:L



12:18:25:5

.....

(4 marks)

18.
a. Simplify

$$\frac{2^8 \times 2^{-3}}{2} = \frac{2^5}{2^1} = 2^4$$

2^4

.....

(2 marks)

b. Find the value of x

$$10^2 \times 10^x = 10000000$$

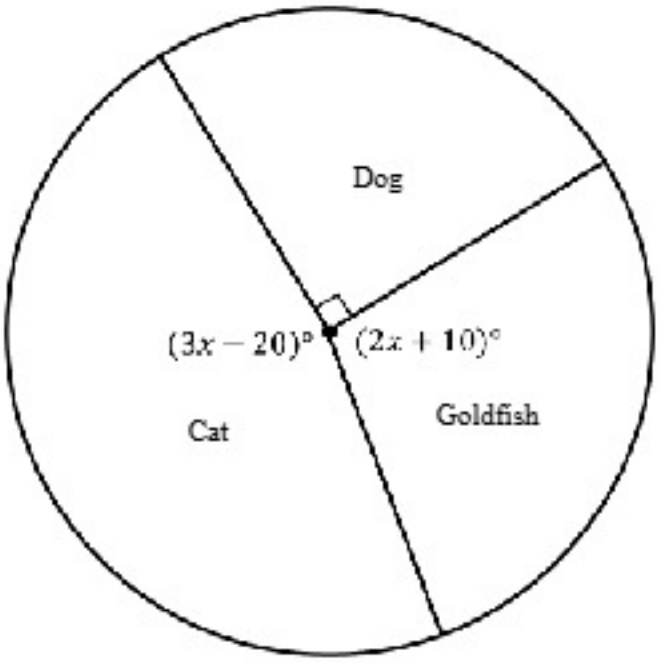
10^7

$x = 5$

.....

(2 marks)
Total for question: 4 marks

19. The diagram below shows a pie chart, with angles not drawn accurately, of a classes favourite pets



a. Find the value of x and therefore the size of each of the missing angles.

$3x - 20 + 2x + 10 = 270$

$5x - 10 = 270$

$5x = 280$

$x = 56$

angles are $148°$ and $122°$

.....

(4 marks)

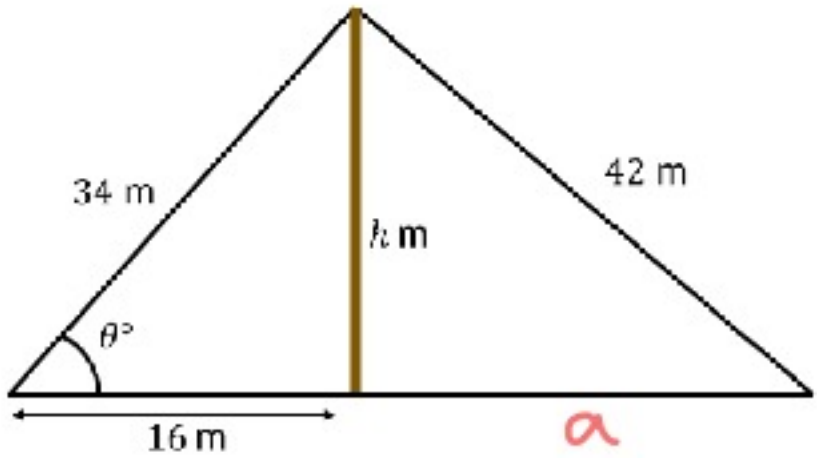
b. If 18 people say they their favourite pet is a dog, how many people are represented by the whole pie chart?

72

..... **(1 mark)**

Total for question: 5 marks

20. The diagram below shows a vertical telephone mast, of height h m, held in place by two cables of length 34 m and 42 m, as shown in the diagram.



a. Calculate the height of the mast, h m.

$h = \sqrt{34^2 - 16^2}$

30

..... m

(2 marks)

b. Find the angle between the ground and the 34 m cable, $\theta°$.

$\cos^{-1}\left(\frac{16}{34}\right) = 61.9°$

..... °

(3 marks)

c. Calculate the horizontal distance between the foot of both of the cables.

$a = \sqrt{42^2 - 30^2} = 29.4\text{ m}$

$+ 16$

45.4

..... m

(2 marks)

Total for question: 7 marks

21. These expressions represent four positive numbers.

$$x, 2x, 6x, 11x$$

The median of these numbers is 12.

Work out the mean of these four numbers.

$\frac{2x+6x}{2} = 12$

$\frac{8x}{2} = 12$

$8x = 24$

$x = 3$ so

numbers are:

3, 6, 18, 33

Mean = 15

.....

(5 marks)

TOTAL FOR PAPER : 80 MARKS