
GCSE Mathematics
Paper 2 (Calculator)
Foundation Tier

Paper Reference: **GFP2.4**

Time: 1 hour 30 minutes
Total Marks: 80

This is a practice paper containing exam-style questions designed to support student preparation. It is not an official past paper or publication from any examination board.

Answer ALL questions.

- 1.** Write 0.64 as a percentage.

.....%

(Total for Question 1 is 1 mark)

- 2.** Write down the value of 2^5

.....

(Total for Question 2 is 1 mark)

- 3.** Here is a list of numbers:

12 7 15 9 11 6 14

Write down the range.

.....

(Total for Question 3 is 1 mark)

- 4.** Change 4200 grams to kilograms.

..... kilograms

(Total for Question 4 is 1 mark)

- 5.** Here are five number cards:

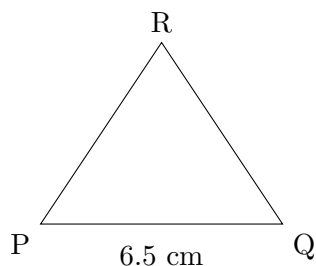
3	6	0	8	5
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Use each card once to make the smallest possible 5-digit number.

.....

(Total for Question 5 is 1 mark)

6. The diagram shows triangle PQR.



(a) Measure the height of the triangle.

..... cm

(1)

(b) Calculate the area of the triangle.

..... cm²

(2)

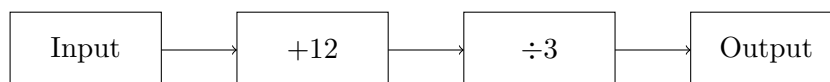
(Total for Question 6 is 3 marks)

7. Zara buys 6 notebooks at £1.75 each and 4 pens at 65p each.
Work out the total cost.

£

(Total for Question 7 is 3 marks)

8. Here is a number machine:



(a) Work out the output when the input is 9.

.....

(2)

(b) Work out the input when the output is 11.

.....

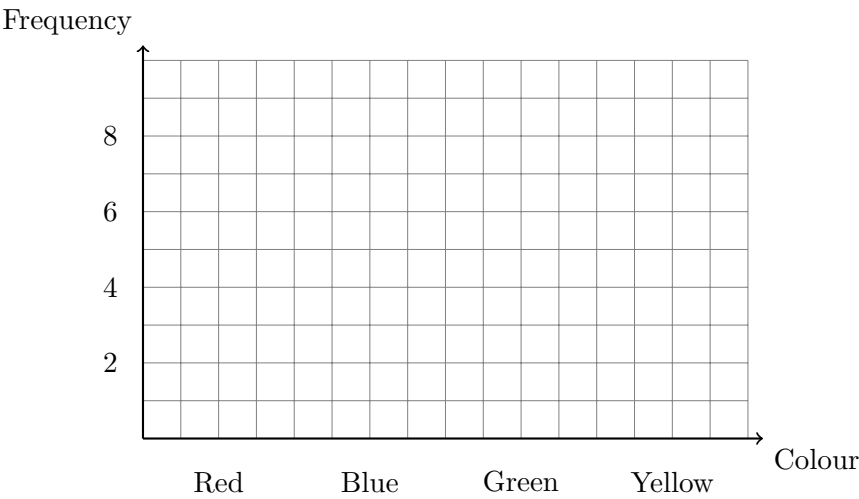
(2)

(Total for Question 8 is 4 marks)

9. The table shows the favourite colours of 24 students.

Colour	Frequency
Red	6
Blue	9
Green	5
Yellow	4

Draw a bar chart for this information.

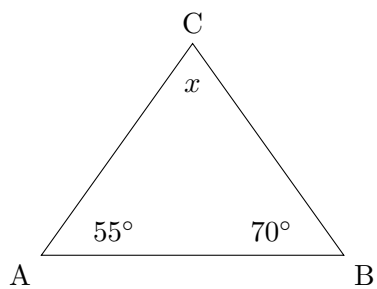


(Total for Question 9 is 3 marks)

10. A television costs £480.
The price increases by 12%.
Work out the new price.

£.....
(Total for Question 10 is 3 marks)

11. The diagram shows triangle ABC.



Work out the value of x .

$x =$ $^\circ$
(Total for Question 11 is 2 marks)

12. (a) Work out $\frac{5}{6} \times 72$

.....

(2)

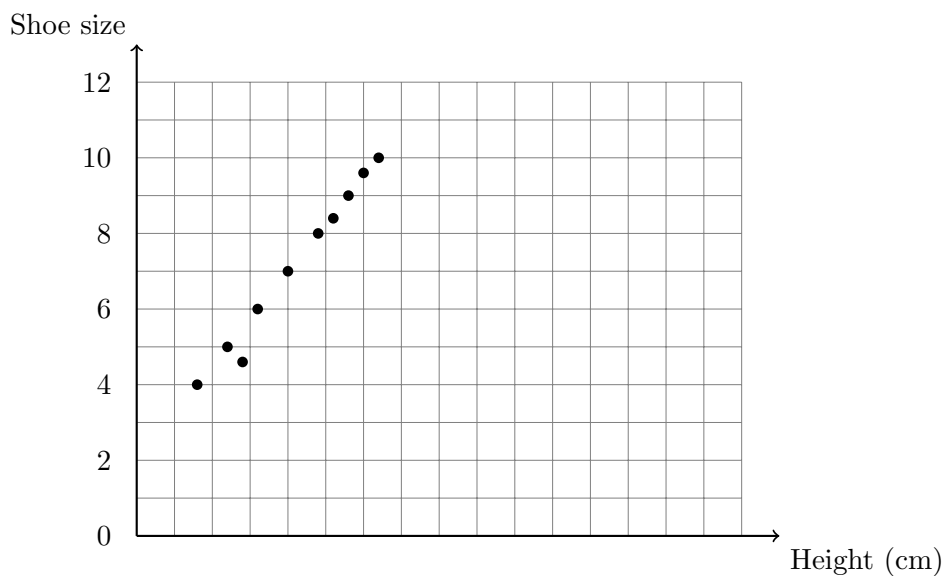
(b) Work out $5\frac{1}{6} - 2\frac{3}{4}$

.....

(3)

(Total for Question 12 is 5 marks)

13. The scatter graph shows information about the height and shoe size of 10 people.



(a) Describe the relationship between height and shoe size.

.....

(1)

(b) Draw a line of best fit on the scatter graph.

(1)

(c) Use your line of best fit to estimate the shoe size for someone who is 175 cm tall.

.....

(1)

(Total for Question 13 is 3 marks)

14. (a) Simplify $8m + 3n - 5m + 2n$

.....

(2)

(b) Solve $6t + 11 = 41$

$t =$

(2)

(Total for Question 14 is 4 marks)

15. Here are the scores, out of 20, in a spelling test for 16 students:
 12, 18, 15, 9, 16, 14, 11, 17, 13, 19, 10, 16, 15, 8, 14, 18
 (a) Complete the frequency table.

Score	Frequency
8-10	
11-13	
14-16	
17-19	

(2)
 (b) Find the modal class.

.....

(1)
 (Total for Question 15 is 3 marks)

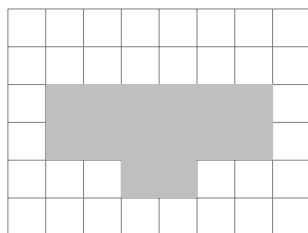
16. Paint is mixed in the ratio white : blue : red = 5 : 2 : 1.
 How much white paint is needed to make 24 litres of paint?

..... litres
 (Total for Question 16 is 3 marks)

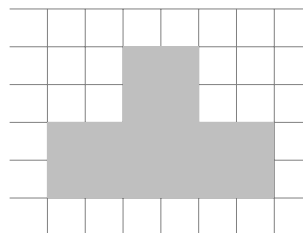
17. Work out 40% of 125

£.....
 (Total for Question 17 is 2 marks)

18. The diagram shows the plan and side elevation of a 3D shape.

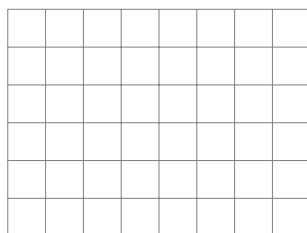


Plan



Side elevation

On the grid below, draw the front elevation of the shape.



(Total for Question 18 is 2 marks)

19. The first four terms of a sequence are:

8, 13, 18, 23, ...

(a) Write down the next term in the sequence.

.....

(1)

(b) Write down the n th term of the sequence.

.....

(2)

(Total for Question 19 is 3 marks)

20. Two fair dice are thrown.

(a) Complete the table to show all the possible totals.

	1	2	3	4	5	6
1	2	3				
2	3					
3						
4						
5						
6						

(2)

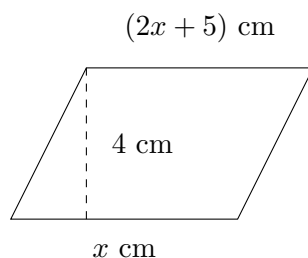
(b) Find the probability of getting a total of 9.

.....

(2)

(Total for Question 20 is 4 marks)

21. The diagram shows a trapezium with parallel sides of length x cm and $(2x + 5)$ cm, and height 4 cm.



The area of the trapezium is 66 cm^2 .

(a) Show that $6x + 10 = 33$

(1)

(b) Solve $6x + 10 = 33$ to find the value of x .

$x =$

(2)

(Total for Question 21 is 3 marks)

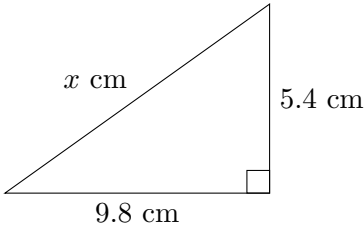
22. The table shows information about the lengths of 50 fish.

Length, l (cm)	Frequency
$10 \leq l < 15$	4
$15 \leq l < 20$	12
$20 \leq l < 25$	18
$25 \leq l < 30$	11
$30 \leq l < 35$	5

Calculate an estimate for the mean length.

..... cm
 (Total for Question 22 is 4 marks)

23. Here is a right-angled triangle.



Work out the value of x . Give your answer correct to 1 decimal place.

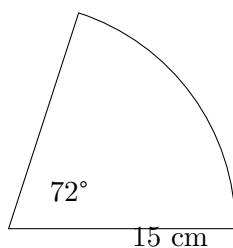
$x =$ cm
 (Total for Question 23 is 3 marks)

24. Ben invests £5500 at 3.6% compound interest per year.
Work out the value of his investment after 2 years.

£

(Total for Question 24 is 3 marks)

25. The diagram shows a sector of a circle with radius 15 cm and angle 72° .



Calculate the perimeter of the sector. Give your answer correct to 1 decimal place.

..... cm

(Total for Question 25 is 3 marks)

26. A house was bought for £180,000.
Its value increased by 6% in the first year and by 4% in the second year.
Work out the value of the house at the end of the second year.

£

(Total for Question 26 is 4 marks)

TOTAL FOR PAPER IS 80 MARKS

**Educational mathematics resources:
stepupmaths.co.uk**