
GCSE Mathematics
Paper 3 (Calculator)
Foundation Tier

Paper Reference: **GFP3.5**

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 the following numbers in order of size.
Start with the smallest number.

0.52 0.6 0.48 0.516

.....

(Total for Question 1 is 1 mark)

- 2.** Write down the value of the 3 in the number 78342

.....

(Total for Question 2 is 1 mark)

- 3.** Write $\frac{5}{8}$ as a decimal.

.....

(Total for Question 3 is 1 mark)

- 4.** Write 24.1857 correct to the nearest whole number.

.....

(Total for Question 4 is 1 mark)

- 5.** Here is a list of numbers.

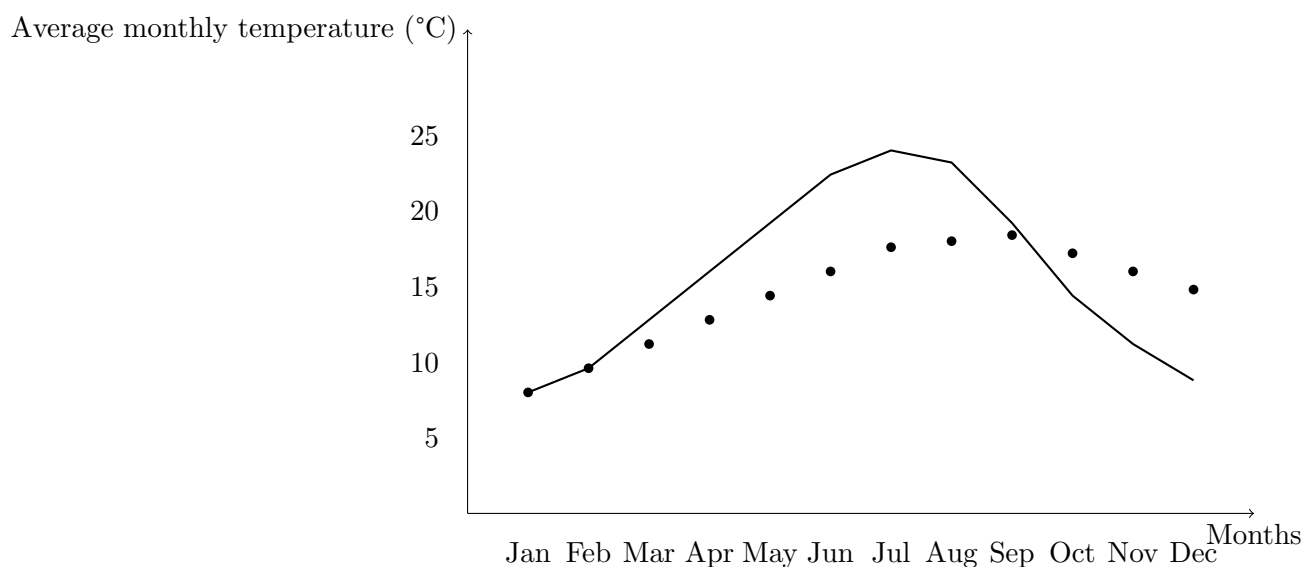
9 15 24 32 41

From the list, write down a multiple of 8

.....

(Total for Question 5 is 1 mark)

6. The graph shows information about the average monthly temperature, in °C, in Bristol.



(a) For how many months was the average monthly temperature greater than 18°C?

.....

(1)

(b) Write down the two months that had the same average monthly temperature.

..... and

(1)

(Total for Question 6 is 2 marks)

7. 240 tickets were sold from a box office.

$\frac{1}{5}$ of these tickets were for adults.

The rest of the tickets were for children.

All the adult tickets were sold for £8 each.

All the child tickets were sold for 65p each.

Work out the total amount of money for which the 240 tickets were sold.

Give your answer in pounds.

£.....

(Total for Question 7 is 3 marks)

8. Four students play a card game.
The table shows the number of points each student has.

Student	Olivia	Marcus	Sophia	Dylan
Number of points	189	156	47	32

Olivia has more points than Dylan.

- (a) How many more?

.....

(1)

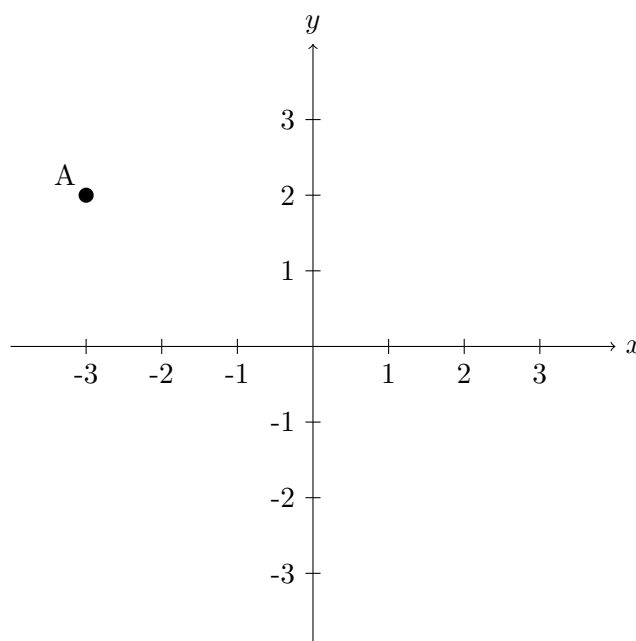
- (b) Work out the mean number of points.

.....

(2)

(Total for Question 8 is 3 marks)

9.



- (a) Write down the coordinates of point A.

(..... ,)

(1)

- (b) On the grid, mark with a cross ($\times$) the point (2, -1)
Label this point B.

(1)

- (c) On the grid, draw the line with equation $x = 1$

(1)

(Total for Question 9 is 3 marks)

10. Here are the first three terms of a sequence.

25 19 22

(i) Write down two numbers that could be the 4th and 5th terms of this sequence.

..... ,

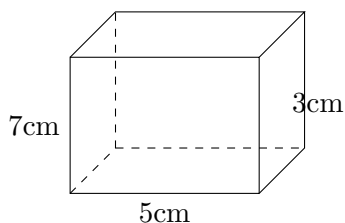
(1)

(ii) Write down the rule you used to get your numbers.

(1)

(Total for Question 10 is 2 marks)

11. Here is a cuboid.



Work out the volume of the cuboid.

..... cm³

(Total for Question 11 is 2 marks)

12. David, Emma and Finn each have a number of marbles.

The number of marbles that Emma has is 3 times the number of marbles that David has.

The number of marbles that Finn has is half the number of marbles that Emma has.

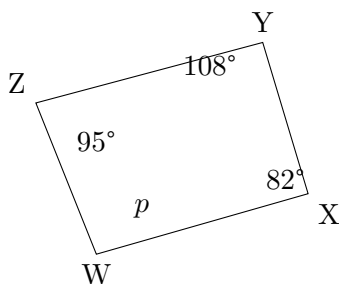
Write down the ratio

the number of marbles that David has : the number of marbles that Emma has : the number of
marbles that Finn has

.....

(Total for Question 12 is 2 marks)

13. WXYZ is a quadrilateral.



(a) (i) Work out the size of angle p .

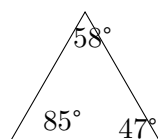
.....°

(1)

(ii) Give a reason for your answer.

(1)

The diagram below shows a triangle.



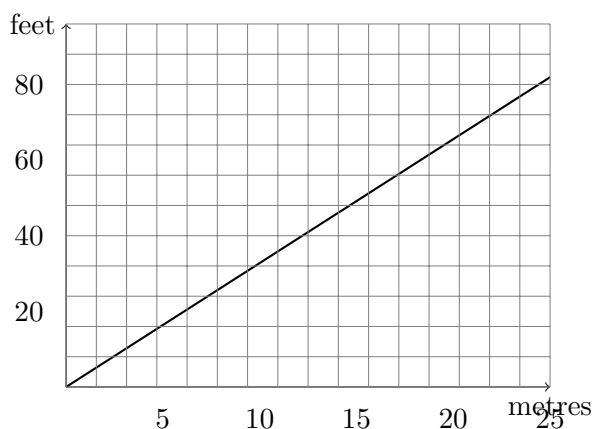
The diagram is wrong.

(b) Explain why.

(1)

(Total for Question 13 is 3 marks)

14. You can use this graph to change between metres and feet.



(a) Change 18 metres to feet.

..... feet

(1)

(b) Change 48 feet to metres.

..... metres

(2)

(Total for Question 14 is 3 marks)

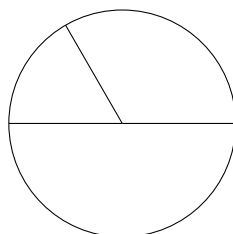
15. 2.4kg of onions and 1.5kg of potatoes cost a total of £2.94
 3kg of potatoes cost £2.70
 Rachel has £2.50
 She wants to buy 4kg of onions.
 Does Rachel have enough money to buy 4kg of onions?
 You must show how you get your answer.

(Total for Question 15 is 5 marks)

16. There are three different types of biscuit in a tin.
 The table gives the number of each type of biscuit.

Type of biscuit	Number of biscuits
Chocolate chip	75
Digestive	60
Shortbread	60

Sarah draws this pie chart for the information in the table.



Tin of biscuits

Write down two different things that are wrong or misleading with this pie chart.

1

2

(Total for Question 16 is 2 marks)

17. (a) Write 94256 correct to 3 significant figures.

.....

(1)

(b) Work out $\frac{(5.3+1.9) \times 2.8}{7.4-3.6}$

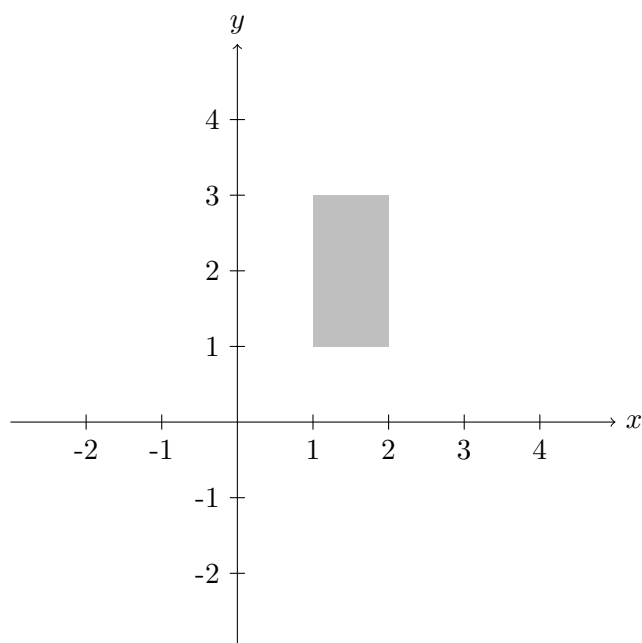
Give your answer as a decimal.

.....

(2)

(Total for Question 17 is 3 marks)

18.



Rotate the shaded shape 180° about (0,0)

(Total for Question 18 is 2 marks)

19. Here are the first four terms of a sequence.

7, 11, 15, 19, ...

(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. A bag contains 9 red marbles, 6 blue marbles and 5 green marbles.

A marble is chosen at random from the bag.

(a) Write down the probability that the marble is red.

.....

(1)

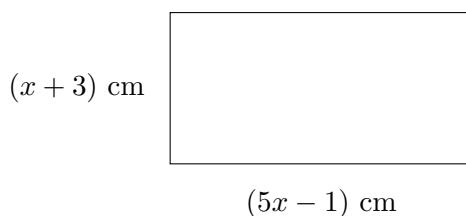
(b) Write down the probability that the marble is not blue.

.....

(2)

(Total for Question 20 is 3 marks)

21. The diagram shows a rectangle with length $(5x - 1)$ cm and width $(x + 3)$ cm.



The area of the rectangle is 78 cm^2 .

(a) Show that $5x^2 + 14x - 3 = 78$

(1)

(b) Solve $5x^2 + 14x - 3 = 78$ to find the value of x .

$x =$

(3)

(Total for Question 21 is 4 marks)

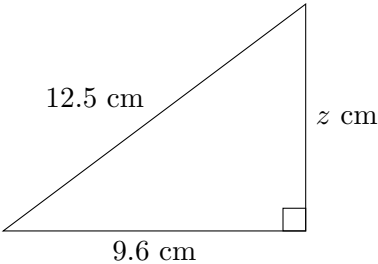
22. The table shows information about the distances, in km, travelled by 40 people to work.

Distance, d (km)	Frequency
$0 \leq d < 5$	8
$5 \leq d < 10$	14
$10 \leq d < 15$	12
$15 \leq d < 20$	4
$20 \leq d < 25$	2

Calculate an estimate for the mean distance.

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

23. Here is a right-angled triangle.



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

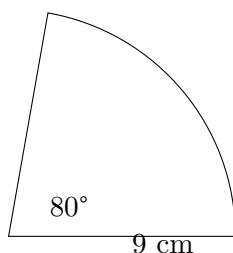
$z =$ cm
 (Total for Question 23 is 3 marks)

24. Sophie invests £5400 at 2.8% compound interest per year.
Work out the value of her investment after 4 years.

£

(Total for Question 24 is 3 marks)

25. The diagram shows a sector of a circle with radius 9 cm and angle 80° .



Calculate the arc length of the sector.
Give your answer in terms of π .

..... cm

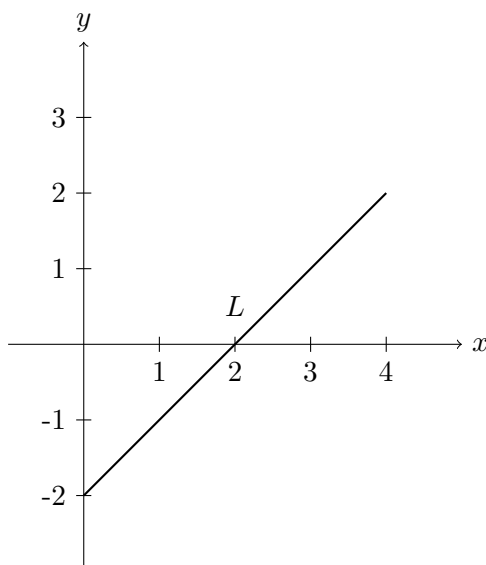
(Total for Question 25 is 3 marks)

26. The population of a city was 125000 in 2019.
The population increased by 6% in 2020 and decreased by 15% in 2021.
Work out the population at the end of 2021.

.....

(Total for Question 26 is 3 marks)

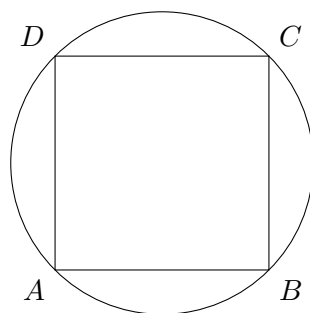
27. The line L is shown on the grid.



Find an equation for L .

.....
(Total for Question 27 is 3 marks)

28. A , B , C and D are points on a circle such that $ABCD$ is a square.



The square $ABCD$ has sides of length 4.2 cm.
Calculate the circumference of the circle.
Give your answer correct to 1 decimal place.
You must show all your working.

..... cm
(Total for Question 28 is 4 marks)

TOTAL FOR PAPER IS 80 MARKS

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