Write your name here

Surname	Other names

Scholarship Paper 2026

Subject: Mathematics 2

Time: 1 Hour

You must have:
Pen, pencil, calculator, ruler

Total Marks

Instructions

- Use **black** ink or ball-point pen.
- **Fill in the boxes** at the top of this page with your name.
- Answer the questions in the spaces provided**.**
  - *there may be more space than you need*.

Information

- The total mark for this paper is **63**
- The marks for **each** question are shown in brackets

Advice

- Keep an eye on the time. Use the 60 marks in 60 minutes as a guide.
- Write your answers neatly and in good English.
- Try to answer every question, but read the question carefully before you start to answer it.
- Check your answers if you have time at the end.

Q1.

Nina buys 8 pencils and 13 identical rulers.
Each pencil costs $0.58
The total cost is $23.62

(a) Work out the cost of each ruler.

$ .....

(3)

Bjorn has $15 to spend on pens.
Each pen costs $0.62
He buys as many pens as he can.

(b) Work out how much change Bjorn should get.

$ .....

(3)

(Total for question = 6 marks)

Q2. (a) Write down a prime number between 14 and 20

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

(b) Find the two prime numbers that have a sum of 25

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

(c) Find the two numbers that have a sum of 60 and a difference of 2

..... **(2)**

(Total for question = 4 marks)

Q3. (a) Complete the following sentences by writing a sensible metric unit on each of the dotted lines.

(i) The distance from Cairo to Nairobi is 5211 .....

(ii) The weight of an egg is 20 .....

(iii) The area of the floor of a classroom is 260 .....

(3)

Cara has a bottle of juice.
There is 1 litre of juice in the bottle.

Cara makes some drinks.
She uses exactly 30 millilitres of this juice to make each drink.

Cara makes as many drinks as possible.

(b) How many drinks does Cara make?

..... **(3)**

(Total for question = 6 marks)

Q4.

(a) Work out the value of $\frac{2.5 + 3.6}{12.7} + \frac{8.2}{5 \times 3.6}$

Give your answer as a decimal.
Write down all the figures on your calculator display.

..... **(2)**

(b) Write your answer to part (a) correct to 3 significant figures.

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

(Total for question = 3 marks)

Q5. (a) Expand $x(10 - x)$

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

(b) Factorise $6y + 27$

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

(c) Make m the subject of the formula $h = \frac{m}{2} + 4$

.....

(2)

(d) Solve $7g + 3 = 2g - 5$

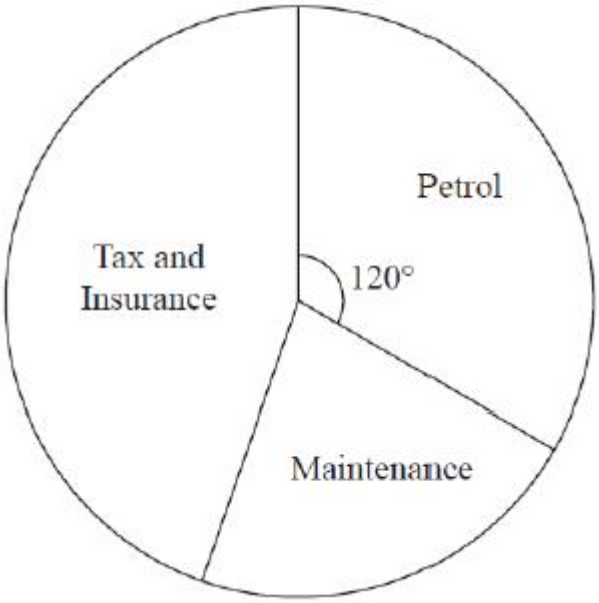
Show clear algebraic working.

g = ... **(3)**

(Total for question = 7 marks)

Q6. (a) The pie chart shows information about the amounts Mrs Gupta spent in one year to run her car.

She spent a total of £1800.



Work out how much Mrs Gupta spent on petrol for her car in the year.

£.....

(2)

(b) The table shows the cost of the electricity, used by the Gupta family, for each 3-month period in one year.

Months	Cost of electricity (£)
January – March	300
April – June	140
July – September	100
October – December	260
Total	800

Rohit Gupta must draw a pie chart for this information for his maths homework.

Work out the angle in the pie chart for the 3-month period from July to September.

..... ° **(2)**

(Total for question = 4 marks)

Q7. A circle has radius 18 cm.

Work out the circumference of the circle.
Give your answer correct to 3 significant figures.

..... cm

(Total for question = 2 marks)

Q8.

The diagram shows a shape with one line of symmetry.

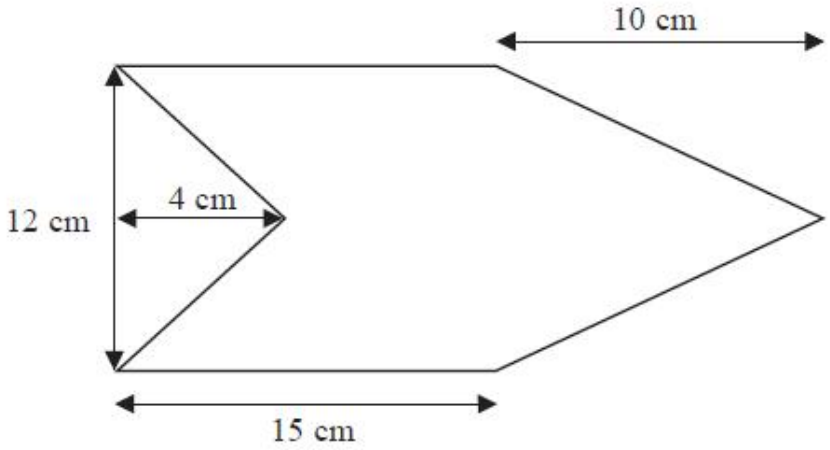


Diagram **NOT** accurately drawn

Work out the area of the shape.

.....cm^2

(Total for question = 4 marks)

Q9. The mean number of goals scored by a hockey team in 8 matches is 6
The team plays 2 more matches and scores *k* goals in each match.
The mean number of goals scored by the hockey team in the 10 matches is 7
Work out the value of *k*

k = ...

(Total for question = 3 marks)

Q10. In 2014, Donald's weekly pay was $640
In 2015, Donald's weekly pay was $668.80

(a) Work out the percentage increase in Donald's pay between 2014 and 2015

..... % **(3)**

In 2015, Donald's weekly pay was 95% of his weekly pay in 2016

(b) Work out Donald's weekly pay in 2016

$ ..... **(3)**

(Total for question = 6 marks)

Q11.

Here is a quadrilateral.

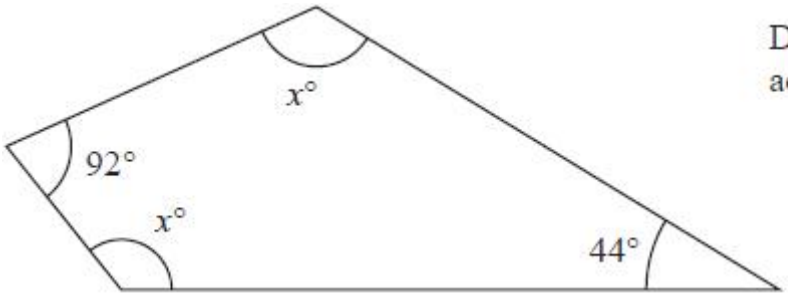


Diagram **NOT** accurately drawn

(i) Work out the value of *x*

x = ...

(3)

(ii) Give a reason for your answer.

.....

(1)

(Total for question = 4 marks)

Q12.

The table shows information about the grades some Year 9 students gained in a biology test and in a physics test. The highest grade is **A** and the lowest grade is **D**.

		Biology			
	Grades	**A**	**B**	**C**	**D**
Physics	**A**	8	6	2	1
	B	3	5	4	0
	C	4	2	6	2
	D	0	0	5	0

(a) How many students gained a grade **C** in biology?

..... **(2)**

(b) How many students gained the same grade in biology as they gained in physics?

..... **(2)**

(c) How many students gained a higher grade in biology than they gained in physics?

..... **(2)**

(Total for question = 6 marks)

Q13.

(a) Solve $\frac{2x+5}{6} = 2x - 5$

Show clear algebraic working.

x = ... **(3)**

(b) Simplify $h^{15} \div h^3$

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

(c) Simplify fully $(2g^3k^5)^4$

..... **(2)**

(d) Given that $\frac{y^5 \times y^n}{y^7} = y^{12}$

work out the value of *n*

n = ... **(2)**

(Total for question = 8 marks)

End of assessment