

Thursday 14 May 2026 – Morning

GCSE (9–1) Mathematics

J560/01 Paper 1 (Foundation Tier)

Time allowed: 1 hour 30 minutes

You must have:

- the Formulae Sheet for Foundation Tier (inside this document)

You can use:

- a scientific or graphical calculator
- geometrical instruments
- tracing paper



Please write clearly in black ink. **Do not write in the barcodes.**

Centre number

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Candidate number

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First name(s)

Last name

INSTRUCTIONS

- Use black ink. You can use an HB pencil, but only for graphs and diagrams.
- Write your answer to each question in the space provided. If you need extra space use the lined pages at the end of this booklet. The question numbers must be clearly shown.
- Answer **all** the questions.
- Where appropriate, your answer should be supported with working. Marks might be given for using a correct method, even if your answer is wrong.
- Use the π button on your calculator or take π to be 3.142 unless the question says something different.

INFORMATION

- The total mark for this paper is **100**.
- The marks for each question are shown in brackets [].
- This document has **24** pages.

ADVICE

- Read each question carefully before you start your answer.

- 1 (a) Write down an even number greater than 2.

(a) [1]

- (b) Write down a square number.

(b) [1]

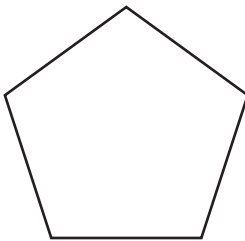
- (c) Write down a prime number less than 20.

(c) [1]

- (d) Work out $\frac{1}{0.5}$.

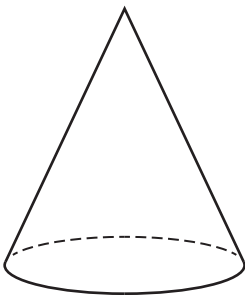
(d) [1]

- 2 (a) Write down the mathematical name of this polygon.



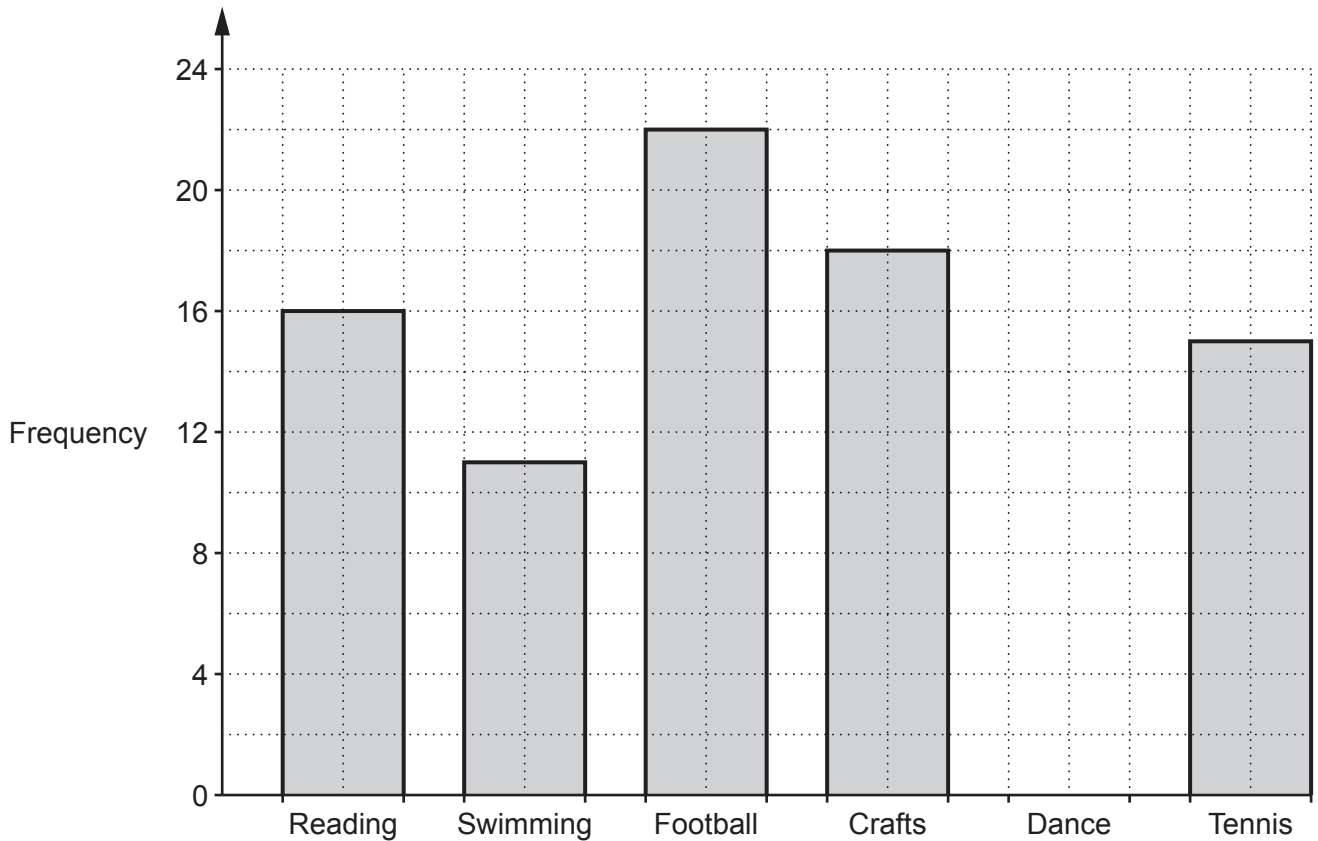
(a) [1]

- (b) Write down the mathematical name of this solid.



(b) [1]

- 3 A group of students choose between six activities.
The bar chart shows the number of students that choose some of the activities.



- (a) How many students choose crafts?

(a) [1]

- (b) 10 students choose dance.

Complete the bar chart to show this information.

[1]

- (c) Which activity is chosen by the **most** students?

(c) [1]

- (d) How many **more** students choose reading than swimming?

(d) [1]

4

- 4 (a) Write 32 centimetres in metres.

(a) m [1]

- (b) Write 150 millilitres as a fraction of 3 litres.

Give your answer in its simplest form.

(b) [3]

- 5 Work out the time 16 minutes after 8:58 am.

..... am [1]

- 6 Here are the first four terms of a sequence.

7 16 25 34

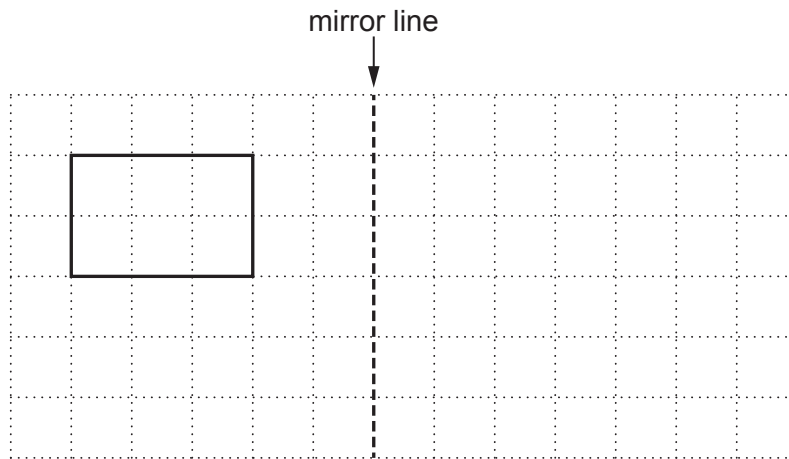
- (a) Write down the next term of the sequence.

(a) [1]

- (b) Explain how you worked out your answer.

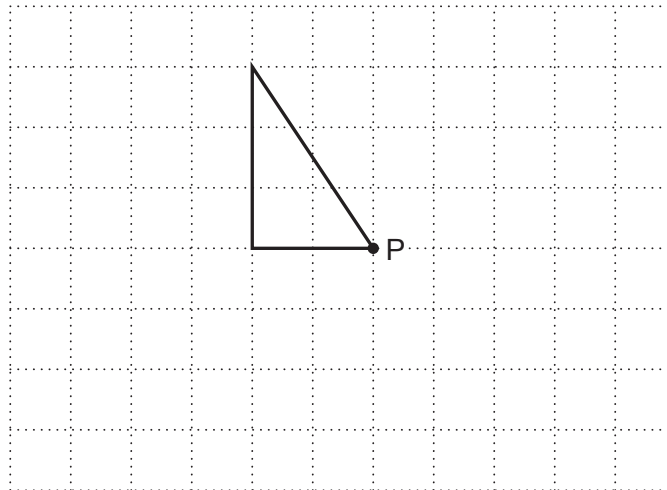
..... [1]

- 7 (a) Reflect the rectangle in the mirror line.



[2]

- (b) Rotate the triangle 180° about the point P.



[2]

- 8 Here is a function machine.
The input is x and the output is y .



Write an equation for y in terms of x .

$y = \dots\dots\dots$ [2]

- 9 Leo buys a mobile phone for £932.

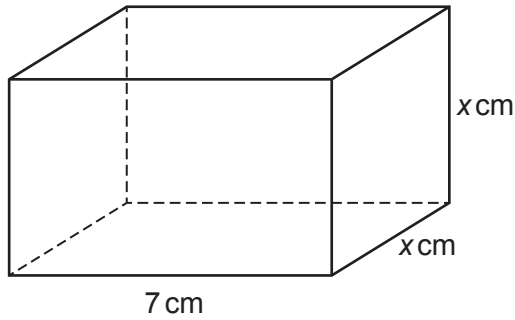
He pays a deposit of £176.

He then pays the rest of the cost in equal payments of £31.50.

Calculate how many payments of £31.50 Leo makes.

$\dots\dots\dots$ payments [2]

- 10 The diagram shows a cuboid.



Not to scale

The width of the cuboid is 7 cm.
 The length and height of the cuboid are both x cm.
 The volume of the cuboid is 63 cm^3 .

Find the value of x .

$x = \dots\dots\dots$ [3]

- 11 It costs £12.60 per hour to hire an e-bike on Friday.
 The cost per hour on Saturday is $1\frac{1}{4}$ times the cost per hour on Friday.
 Work out how much it costs to hire the e-bike for 6 hours on Saturday.

£ $\dots\dots\dots$ [3]

12 (a) Solve.

$$a + 3 = 17$$

(a) $a = \dots\dots\dots$ [1]

(b) Factorise fully.

$$7cd - 28d$$

(b) $\dots\dots\dots$ [2]

(c) Multiply out and simplify.

$$(4x + 2)(x - 5)$$

(c) $\dots\dots\dots$ [3]

13 (a) Work out 3^6 .

(a) $\dots\dots\dots$ [1]

(b) Work out $\frac{\sqrt[3]{64}}{8}$.

(b) $\dots\dots\dots$ [2]

- 14 (a)** Eve writes down the amount of petrol she buys each week.
The amounts of petrol, in litres, Eve buys in weeks 1 to 6 are

68 43 82 77 59 73.

Eve buys some more petrol in week 7.

The mean of the amounts of petrol Eve buys in **weeks 1 to 7** is 62 litres.

Calculate how much petrol Eve buys in week 7.

(a) litres **[3]**

- (b)** The cost of 68 litres of petrol is £98.60.

Calculate the cost of 35 litres of this petrol.

(b) £ **[2]**

- 15** 40 people go out for a meal.
Each person chooses either pasta, pizza or salad.
17 people choose pasta.

Kai wants to draw a pie chart to show this information.

Calculate the angle for pasta.

..... ° **[3]**

- 16** A shop has 108 toy cars.
Taylor buys 25% of the 108 toy cars.
Nina buys $\frac{2}{9}$ of the 108 toy cars.

Calculate the percentage of toy cars the shop has left.

Give your answer correct to **1** decimal place.

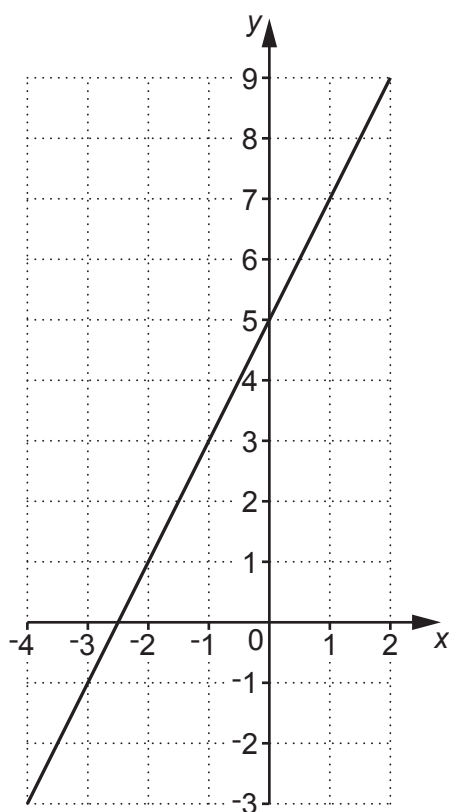
..... % **[4]**

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Turn over for the next question

17 A straight line is shown on the graph.



(a) Write down the y -intercept.

(a) [1]

(b) Show that the gradient of the line is 2.

[1]

(c) Write down the equation of the line.

(c) [1]

(d) Will this line pass through the point (31, 67)?

Show how you decide.

..... because

..... [2]

18 (a) Write 4.3×10^{-5} as an ordinary number.

(a) [1]

(b) Work out $(6.12 \times 10^4) \div (1.7 \times 10^{-3})$.

Give your answer in standard form.

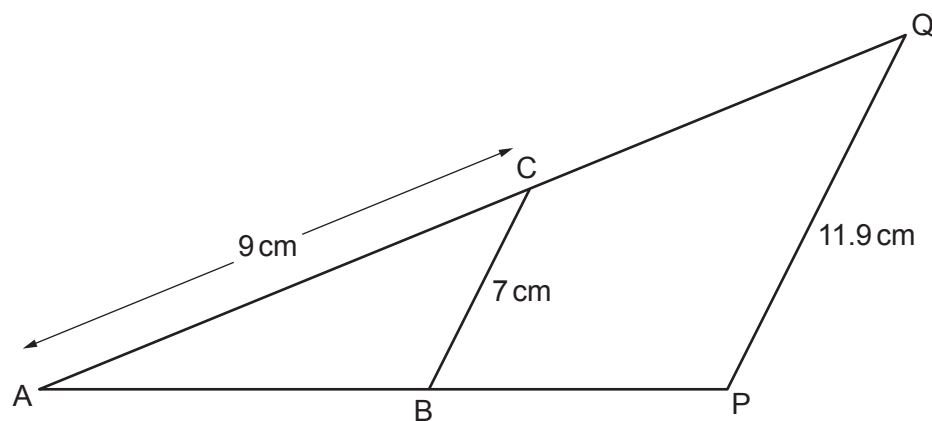
(b) [2]

19 Calculate.

$$\frac{56.7 - 16.7}{3.2} + \frac{44.8}{12.8}$$

..... [1]

- 20 The diagram shows two similar triangles, ABC and APQ.



Not to scale

$AC = 9 \text{ cm}.$

$BC = 7 \text{ cm}.$

$PQ = 11.9 \text{ cm}.$

Work out the length of CQ.

$CQ = \dots\dots\dots \text{ cm [4]}$

21 The table shows the ages of some people at a park.

Age (a)	Number of people		
$0 < a \leq 20$	25		
$20 < a \leq 40$	46		
$40 < a \leq 60$	38		
$60 < a \leq 80$	10		

(a) Calculate an estimate of the mean age of the people at the park.

(a) [4]

(b) The park manager says the oldest person at the park is 80.

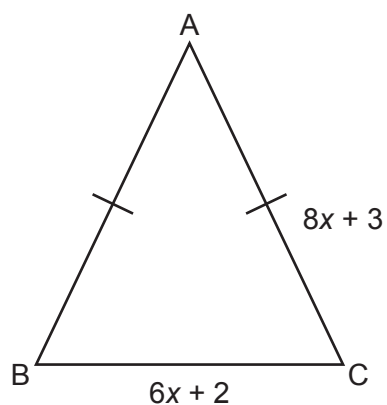
Explain why the park manager may **not** be correct.

.....

..... [1]

22 In this question, all lengths are in centimetres.

The diagram shows an isosceles triangle ABC.



Not to scale

$$AC = 8x + 3.$$

$$BC = 6x + 2.$$

The **perimeter** of the isosceles triangle is 85 cm.

Calculate the length of AB.

You must show your working.

..... cm [5]

23 (a) Write the ratio 6.5 m : 26 km in its simplest form.

(a) : [2]

(b) The ratio $d : e = 2 : 5$.
The ratio $e : f = 3 : 4$.

Find the ratio $d : f$.

Give your answer in its simplest form.

(b) : [3]

24 A shopkeeper buys 250 oranges for £48.

They put the oranges into bags to sell in their shop.
The bags cost 7p each.

The shopkeeper puts 6 oranges into each bag.
They fill as many bags as possible.

They sell all the bags of 6 oranges for £1.80 each.

Calculate their percentage profit.

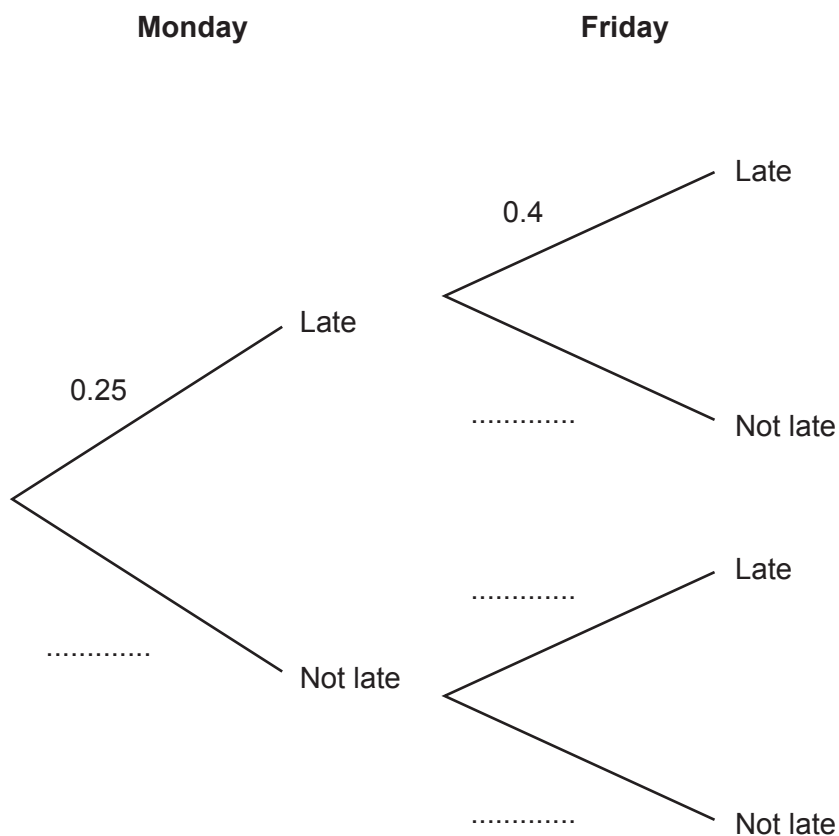
..... % **[5]**

- 25** A plane flies the same route on Monday and on Friday.

The probability that the plane is late on Monday is 0.25.

The probability that the plane is late on Friday is 0.4.

- (a) Complete the probability tree diagram.

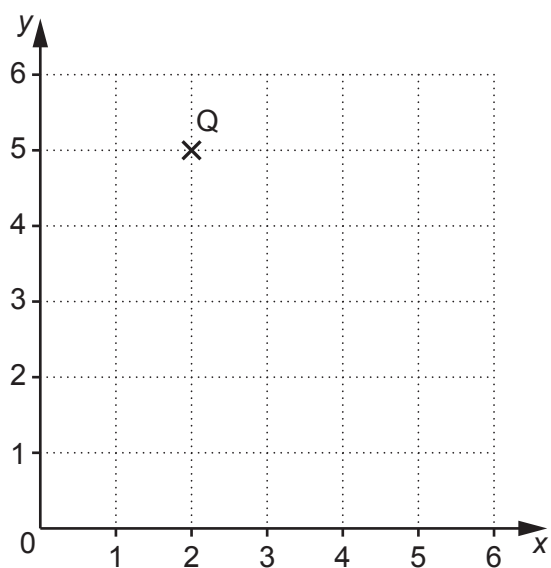


[2]

- (b) Find the probability that the plane is late on Monday but **not** late on Friday.

(b) [2]

- 26 (a) The graph shows point Q.



$$\overrightarrow{PQ} = \begin{pmatrix} -3 \\ 4 \end{pmatrix}.$$

Find the coordinates of point P.

(a) $P = (\dots\dots\dots, \dots\dots\dots)$ [2]

(b) Vector $\mathbf{a} = \begin{pmatrix} 3 \\ -1 \end{pmatrix}$.

Vector $\mathbf{b} = \begin{pmatrix} 2 \\ -5 \end{pmatrix}$.

On the grid below, draw the vector $2\mathbf{a} - \mathbf{b}$.



[3]

- 27** In 2023 a population of ducks increased by 20%.
In 2024 the population of ducks decreased by 35%.

Sam says that over the two years the population of ducks decreased by 15%.

Show that Sam is **not** correct.

Sam is **not** correct because

..... **[6]**

END OF QUESTION PAPER

[illegible]



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