



THIRD SPACE
LEARNING

Mathematics

Paper 2

(Calculator)

Foundation Tier

AQA GCSE

SET 4

Mathematics Paper 2 (Calculator) Foundation Tier AQA

GCSE SET 4

Name

Total marks

Paper length: 1hr 30mins



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.

Information

- The total mark for this paper is 80
- The marks for each question are shown in brackets – use this as a guide as to how much time to spend on each question.

Advice

- Read each question carefully before you start to answer it.
- Keep an eye on the time.
- Try to answer every question.
- Check your answers if you have time at the end.

Question	Mark
1	
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You must have: Ruler graduated in centimetres and millimetres, protractor, pair of compasses, pen, HB pencil, eraser. Tracing paper may be used.

This practice paper is based on the topics from the **advanced information for the November 2025 exam series**.

Please note, this practice paper is an example to help revision, these topics can be tested in other ways and other topics may be included in the actual papers

- 1 Circle the number that rounds to 1790 to the nearest 10.

[1 mark]

1689 1784 1787 1795

- 2 What is 4.5 metres in centimetres?
Circle your answer.

[1 mark]

45cm 0.45cm 0.045cm 450cm

- 3 An angle is 22° .
Circle the correct term to describe the angle.

[1 mark]

Acute Obtuse Reflex Right angle

- 4 Circle the expression that has the **smallest** value when $x = 7$.

[1 mark]

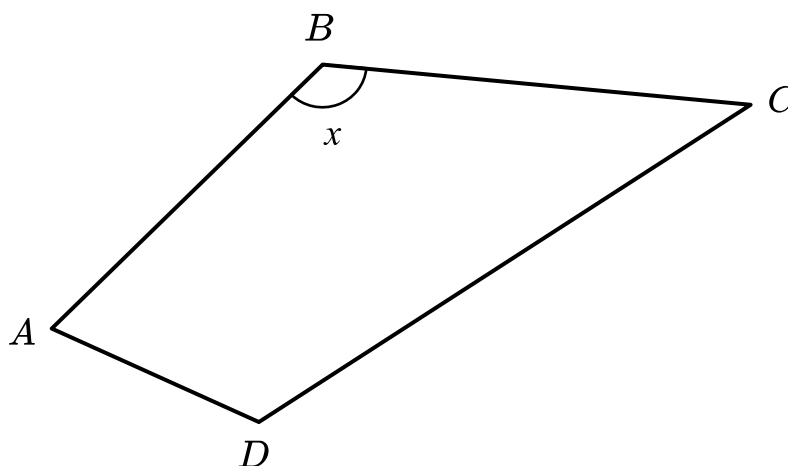
x^2 $\frac{x}{2}$ $x - 2$ $x + 1$

- 5 Write $1\frac{7}{8}$ as an improper fraction.

[1 mark]

Answer _____

- 6 Here is a quadrilateral $ABCD$.



- (a) Measure the length of the side CD .
Give your answer in centimetres.

[1 mark]

Answer _____ *cm*

Measure the size of the angle marked x .

[1 mark]

Answer _____ °

7 18 people were asked to name their favourite sport.

Here are the results.

Favourite sport	Frequency
Football	5
Hockey	4
Rugby	3
Swimming	6

(a) One of the people was picked at random.

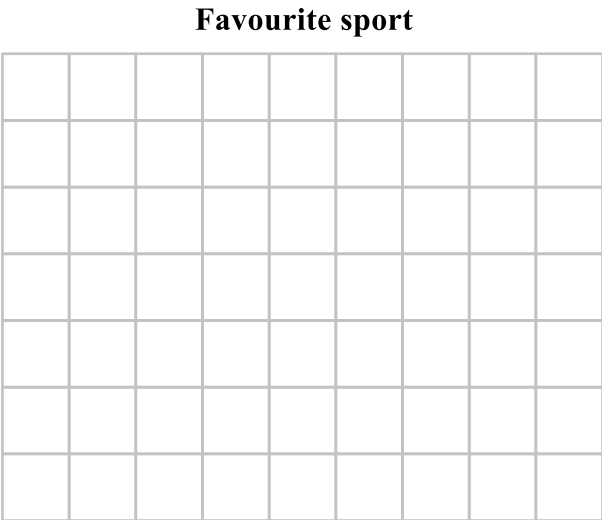
Work out the probability that their favourite sport was hockey or swimming.

[1 mark]

Answer _____

(b) On the grid, draw a bar chart to represent the results.

[3 marks]



- 8 Heidi goes to the beach.
She leaves home at 10am.
It takes her 35 minutes to travel to the beach.
Heidi has £3.50 in her purse.

The parking tariffs are:

Up to 1 hour	£2
1 – 2 hours	£3
2 – 4 hours	£4
4+ hours	£6

Heidi pays for the longest time period of parking that she can with the money in her purse.
What time will Heidi need to leave the beach?

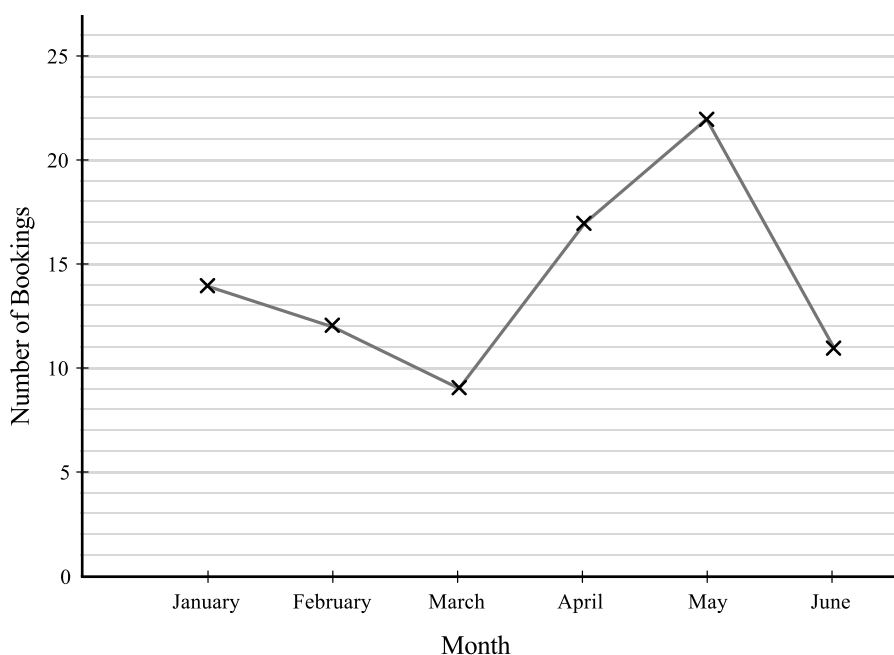
[3 marks]

Answer _____

- 9 Cat says that $\frac{1}{3} = 0.3$
Explain why Cat is wrong.

[1 mark]

- 10** The graph shows information about the number of bookings received by a campsite over the months of January to June.



- (a)** How many bookings were made in April?

[1 mark]

Answer _____

- (b)** Find the range of the number of bookings made per month from January to June.

[2 marks]

Answer _____

- (c)** What fraction of the bookings were made in January?

[2 marks]

Answer _____

- 11** Elkana is creating a 4 digit password.

The password is the letter E followed by a combination of the characters 3, 5 and #.

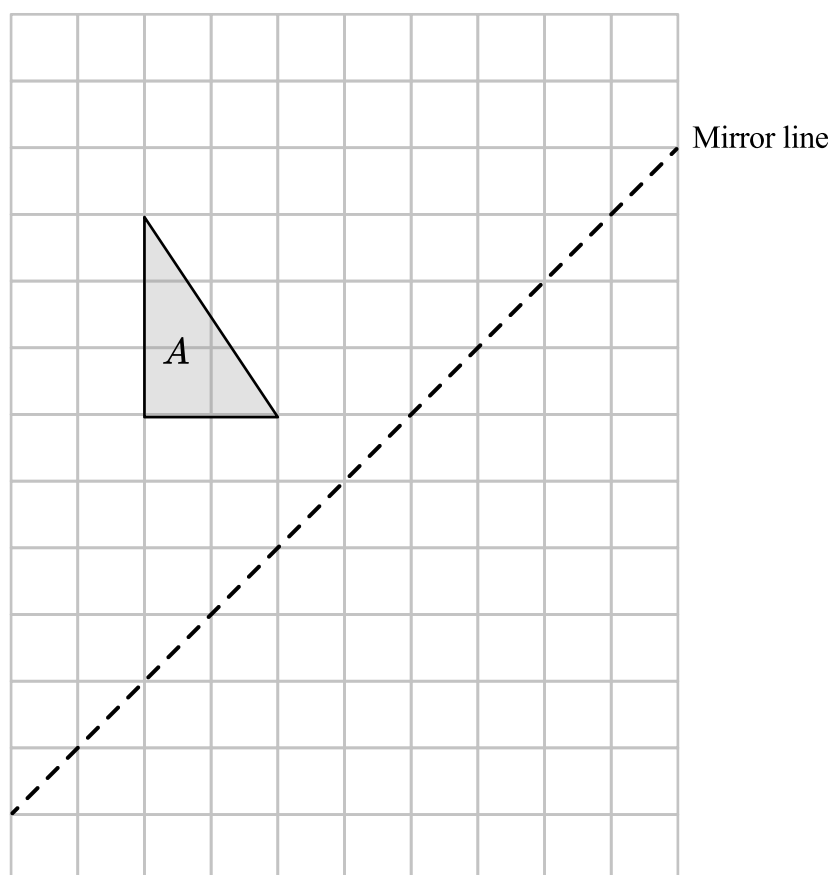
Write down all the possibilities for Elkana's password. The first one has been done for you.

[2 marks]

E 3 5 #

- 12** Reflect shape *A* in the mirror line.

[2 marks]



- 13** A handyman worked for 3.5 hours on Wednesday.
This is $\frac{1}{12}$ of the total number of hours he worked that week.
Work out the total number of hours he worked that week.

[2 marks]

Answer _____

- 14** On a map, it is 2.4cm from the park to the school and 4cm from the park to the shop.
The real distance from the park to the school is 384m .
What is the real distance from the park to the shop?

[3 marks]

Answer _____

15 A shop sells packs of socks. Socks come in packs of 4 or packs of 10.
The shop has two offers on.

Offer A

4 pack

3 packs
for £9

Offer B

10 pack

2 packs
for £17

Which offer is better value for money?
You must show how you got your answer.

[3 marks]

Answer _____

16 Adam owns A books.

Ben owns twice as many books as Adam.

Laura owns 3 more books than Ben.

The total number of books owned by Adam, Ben and Laura is T .

(a) Find a formula for T in terms of A .

[3 marks]

Answer _____

17 $x^2 = 81$.

Circle the value of \sqrt{x} .

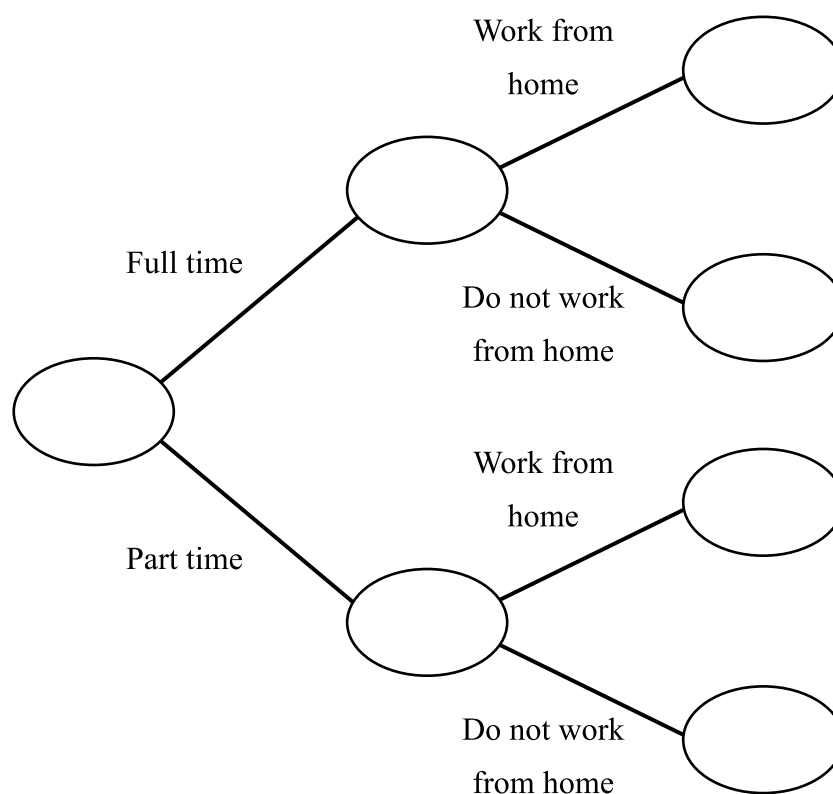
[1 mark]

9 3 243 4.5

- 18** 80 people are asked about their jobs.
56 of the people work full time and the rest work part time.
Of those who work full time, $\frac{3}{8}$ work from home.
Altogether, 40% of the people work from home.

(a) Complete the frequency tree for this information.

[5 marks]



(b) What is the probability that a part time worker works from home?

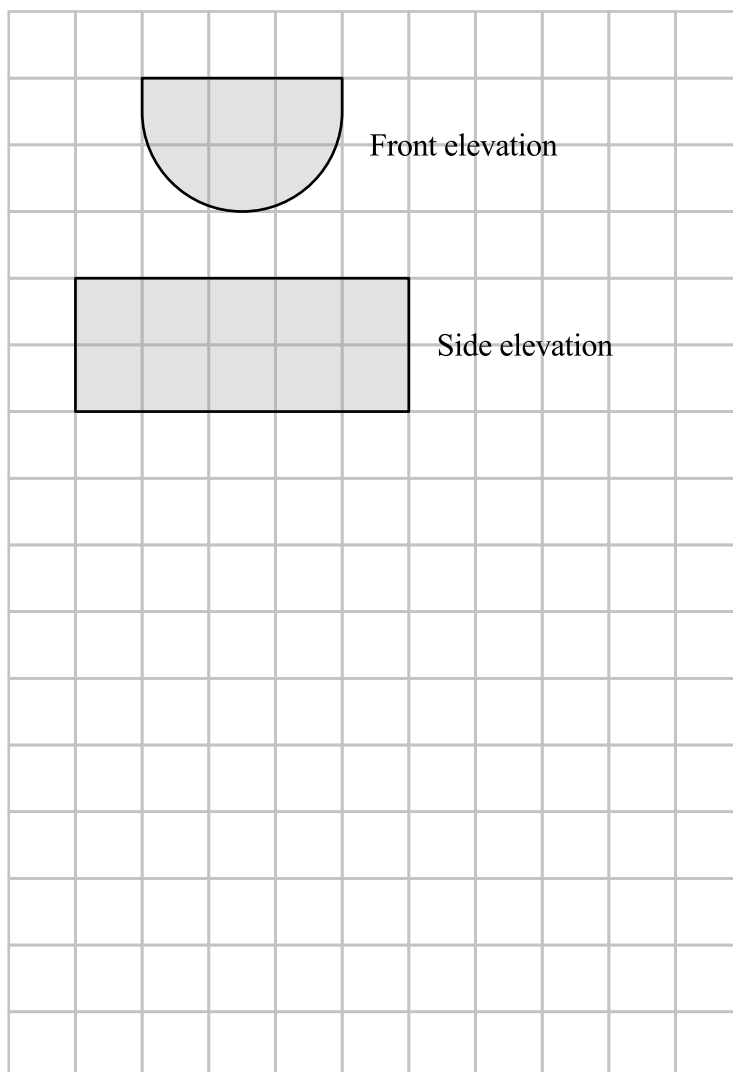
[2 marks]

Answer _____

19 The front elevation and the side elevation of a solid are shown on the grid.

On the grid, draw the plan of the solid.

[2 marks]



20 Let $x < 5$ and $y \leq 8$

where x and y are integers.

Tick the correct box for each statement.

[3 marks]

	True	False
The largest possible value of $2x$ is 8	<input type="checkbox"/>	<input type="checkbox"/>
The largest possible value of $x + y$ is 13	<input type="checkbox"/>	<input type="checkbox"/>
The largest possible value of $y - x$ is 3	<input type="checkbox"/>	<input type="checkbox"/>

21 (a) Simplify $p^7 \div p^3$

[1 mark]

Answer _____

(b) Simplify $(q^3)^5$

[1 mark]

Answer _____

(c) Matthew simplifies $2x^2 \times 3x^5$

Matthew's answer is $5x^7$.

Explain Matthew's mistake.

[1 mark]

22 Blue and yellow paint is needed to make green paint.

5 litres of blue paint costs £17.50.

The ratio of the cost of blue paint to the cost of yellow paint is 5:6.

Work out the cost of 8 litres of yellow paint.

[4 marks]

Answer £ _____

23 Solve $3(2x + 4) = 2(5x - 3)$

[3 marks]

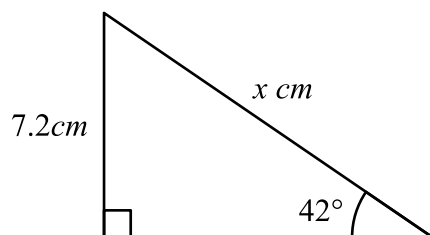
Answer $x =$ _____

24 Find the highest common factor (HCF) of 48 and 72.

[2 marks]

Answer _____

25



Work out the value of x .

Give your answer correct to 3 significant figures.

[2 marks]

Answer $x =$ _____

26 (a) Circle the reciprocal of 0.4

[1 mark]

0.6 0.25 2.5 1.6

(b) $x = 230$ to 2 significant figures.

Complete the error interval for x .

[2 marks]

Answer _____ $\leq x <$ _____

27 The cost of 3 teas and 4 coffees is £10.80.

The cost of 2 teas and 5 coffees is £11.40.

Work out the cost of 4 teas and 1 coffee.

You must show all your working.

[5 marks]

Answer £ _____

28 (a) The equation of a line is $y = 2x - 4$
Circle the point that is on the line.

[1 mark]

(0, 4) (4, 0) (−4, 0) (0, −4)

(b) The equation of a different line is $y - 2x - 4 = 0$
Tick the correct statement.

[1 mark]

The lines have the same gradient	
The lines have the same y -intercept	
The lines have the same gradient and y -intercept	
The lines have different gradients and y -intercepts	

29 The radius of planet A is $4 \times 10^3 \text{ km}$
The volume of planet B is 9.05×10^{11}

Volume of a Sphere: $V = \frac{4}{3}\pi r^3$

How many times greater is the radius of planet B than the radius of planet A ?

[4 marks]

Answer _____

30

$$\mathbf{a} = \begin{pmatrix} 2 \\ 5 \end{pmatrix} \quad \mathbf{b} = \begin{pmatrix} -2 \\ -1 \end{pmatrix}$$

Work out $2\mathbf{a} + \mathbf{b}$ **[2 marks]**

Answer _____

31 Some people were asked whether they had any siblings.

20% of the people said no.

60% of the people who said yes, said they had more than one sibling.

What percentage of the people asked had more than one sibling?

[2 marks]

Answer _____

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