



THIRD SPACE
LEARNING

Mathematics

Paper 1

(Calculator)

Foundation Tier

OCR GCSE

SET 5

Mathematics Paper 1 (Calculator) Foundation Tier OCR

GCSE SET 5

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.

Question	Mark
1	
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Information

- The total mark for this paper is 100
- 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.

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 2026 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 Write down an example of each of the following.

(a) An odd number.

(a) [1]

(b) A multiple of 9

(b) [1]

(c) A square number between 40 and 60

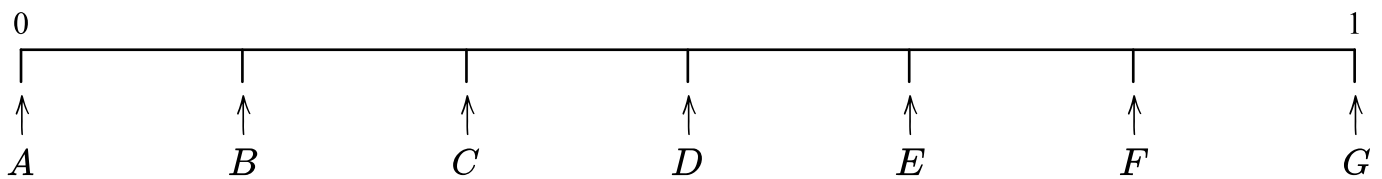
(c) [1]

(d) A prime number more than 10

(d) [1]

2 A fair 6 sided dice is rolled.

The diagram shows a probability scale.



Which arrow shows the probability that the dice

(a) Lands on 4

(a) [1]

(b) Lands on a number less than 5

(b) [1]

3 (a) Write 77% as a fraction.

(a) [1]

(b) Write $\frac{3}{8}$ as a decimal.

(b) [1]

(c) Write 0.48 as a percentage.

(c) [1]

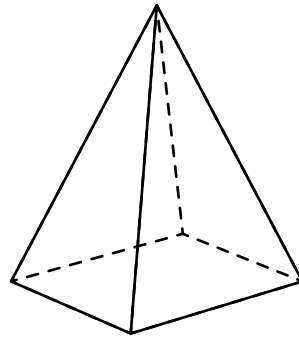
4 (a) Round 38729 to the nearest 100.

(a) [1]

(b) Round 0.3794 to 2 decimal places.

(b) [1]

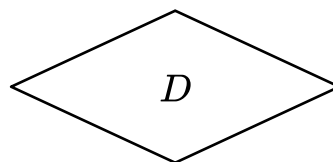
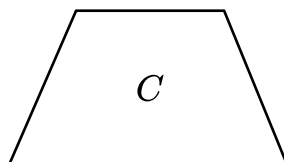
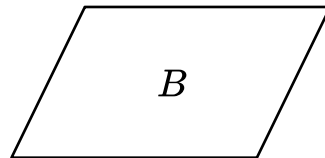
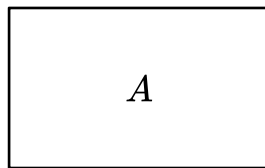
5 (a) Here is a 3D shape.



Write down the mathematical name of this shape.

(a) [1]

(b)



Write down the letters of any shapes with the following properties

[3]

Property	Shape/shapes
1 line of symmetry	
2 lines of symmetry	
Rotational symmetry order 2	

6 (a) Simplify $b + b + b + b$

(a) [1]

(b) Simplify $3a + a + 7a - 2a$

(b) [1]

(c) Simplify $y \times y \times y$

(c) [1]

7 Lorraine writes down the number of miles her car has travelled before and after a journey.

Before	69543
After	69871

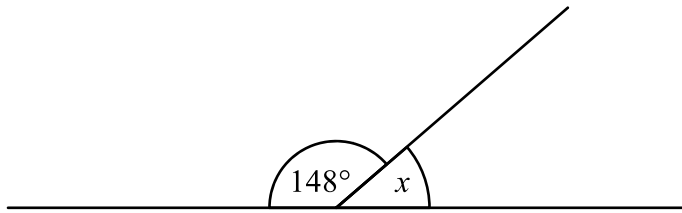
Lorraine can claim 45p per mile from her employer to cover her travel expenses.

How much can Lorraine claim for this journey?

Give your answer in pounds.

..... [4]

8 (a) Work out the size of angle x

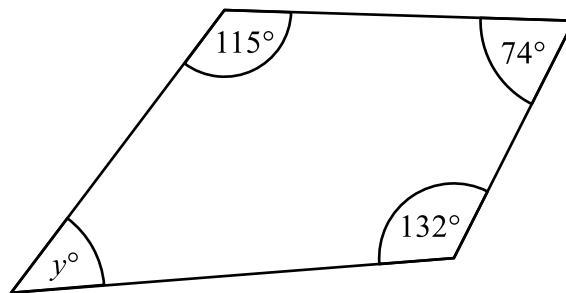


Not to scale

$x =$ _____ $^{\circ}$ because

[2]

(b) Work out the size of angle y .
Give a reason for your answer.



Not to scale

$y =$ _____ $^{\circ}$ because

[2]

9 Here is part of a bus timetable between Saron and Carmarthen.

Saron	0711		0811		0911
Cwmdud	0722		0823		0923
Cynwel Elfed	0729	0800	0831	0900	0931
Bronwydd	0736	0807	0839	0908	0939
Abergwili	0744	0815	0848	0917	0948
Carmarthen	0750	0821	0855	0924	0955

(a) How long should the 0711 bus from Saron take to get to Abergwili?

(a) [1]

(b) Sheila catches the bus from Saron to Carmarthen.

It takes Sheila 8 minutes to walk from her house to the bus stop in Saron.

It takes Sheila 11 minutes to walk from the bus stop in Carmarthen to her office.

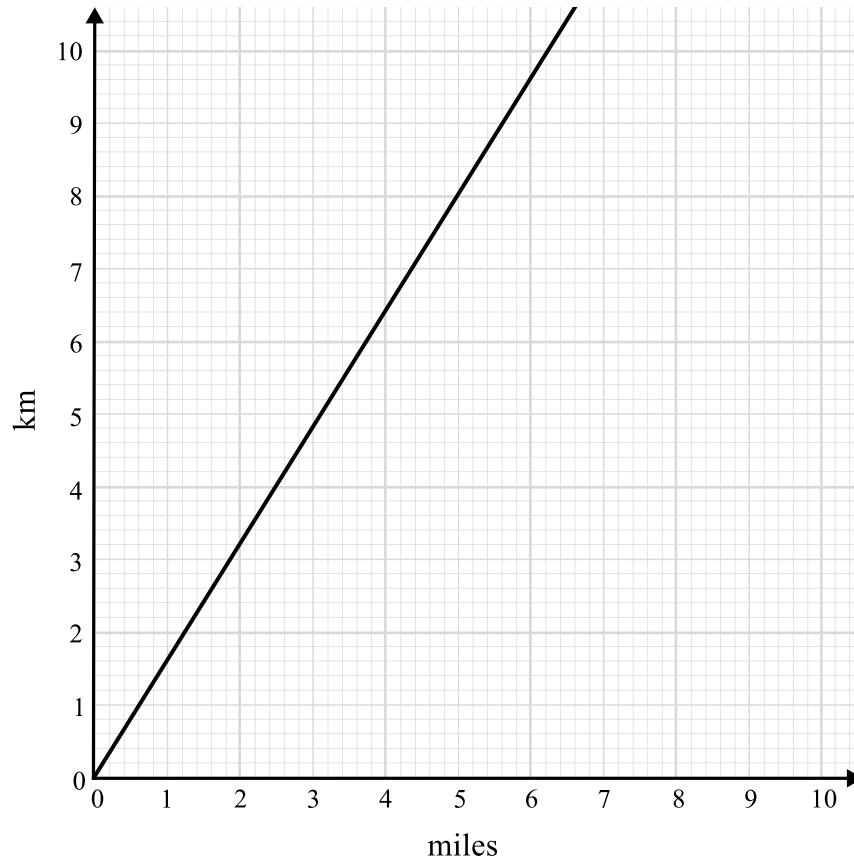
Sheila needs to get to work in Carmarthen by 0915

Write out a plan for Sheila's journey.

State the latest time that Sheila can leave the house and the time she will get to work.

[3]

10 This graph can be used to convert miles into km.



(a) Use the graph to convert 3 miles into km.

(a) km [1]

(b) The speed limit on a road is 90km/h.

Gary drives along the road at 58 miles per hour.

Does Gary break the speed limit?

Show how you decide.

(b) [3]

- 11 A factory produces 3000 tubes of toothpaste per day.
A box contains 24 tubes of toothpaste.
A crate contains 16 boxes.

How many full crates of toothpaste are produced in 5 days?

----- [4]

12 $a = 379 - 13^2$

$$b = \frac{24 \times 32}{12.8}$$

Work out the value of $\frac{a}{b}$

----- [2]

13 Lottie spins a biased spinner 50 times.

Lottie records the number that the spinner lands on in the table below.

Number	Frequency
1	22
2	11
3	3
4	14

Lottie spins the spinner again.

Use Lottie's results to estimate the probability that the spinner will **not** land on 1

..... [2]

14 Vector **a** is drawn on this grid.



(a) Write vector **a** as a column vector.

(a) $\begin{pmatrix} \\ \end{pmatrix}$ [2]

(b) On the grid above, draw the vector **2a**

[1]

15 150 people chose their favourite pizza toppings from margherita, pepperoni and Hawaiian.

Of the 150 people, 82 were children.

62 people chose margherita.

42 children chose margherita.

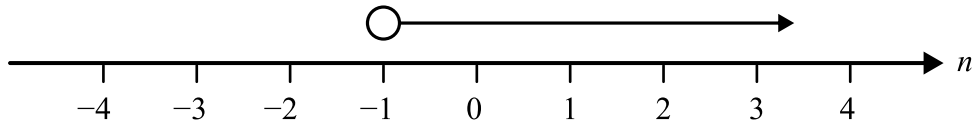
18 children chose Hawaiian.

Twice as many adults as children chose Hawaiian.

Work out the number of children who chose pepperoni.

[4]

16



(a) Write down the inequality shown on the number line.

(a) [1]

(b) Solve $3p - 11 < p + 5$

(b) [2]

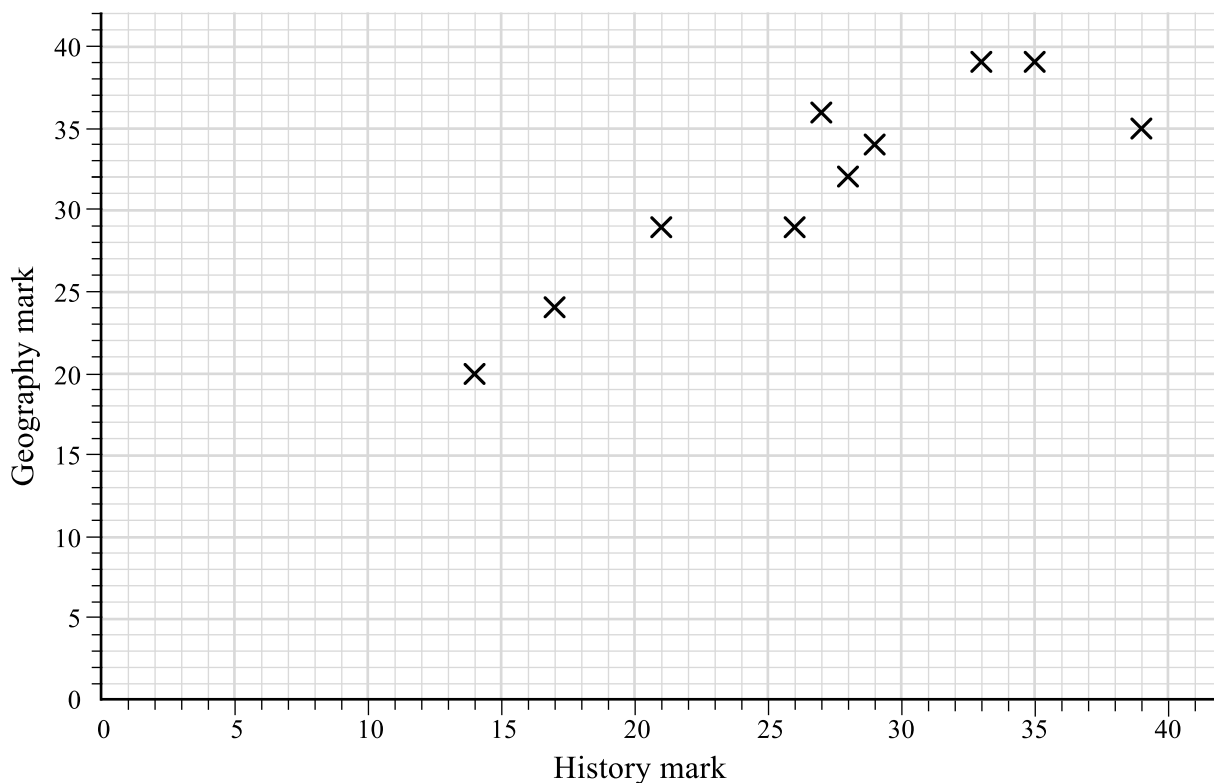
17 The table shows information about the number of children in 50 primary schools.

Number of children	Frequency
$0 < c \leq 100$	6
$100 < c \leq 200$	16
$200 < c \leq 300$	11
$300 < c \leq 400$	10
$400 < c \leq 500$	7

Work out an estimate for the mean number of children in the schools.

..... [3]

18 The scatter diagram shows the history and geography marks of 10 students in their recent tests.



(a) The table has information for 2 more students.

Plot these on the scatter diagram.

[2]

History mark	10	30
Geography mark	15	30

(b) Describe the correlation shown in the graph.

(b) [1]

(c) Another student scored 25 in the history test.

Use the graph to estimate this student's score in the geography test.

(c) [2]

Question continued on the next page

(d) Both tests were out of 40. Which test do you think was easier? Explain why.

[2]

19 (a) The first 5 terms of an arithmetic sequence are

6 11 16 21 26...

Find an expression in terms of n for the n th term of this sequence.

(a) [2]

(b) The n th term of a different sequence is $n^2 + 3$

172 is a term in this sequence.

Find the next term after 172.

(b) [3]

20 For each graph below, select its possible equation from this list.

A $y = x^2$

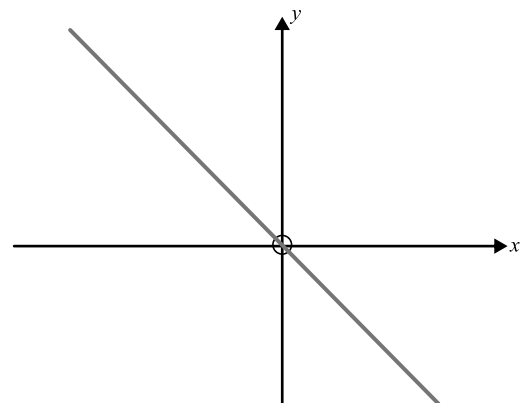
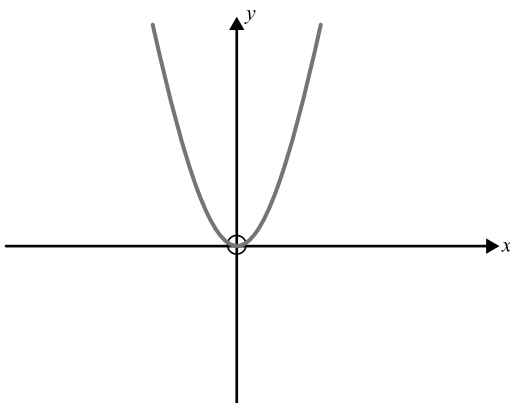
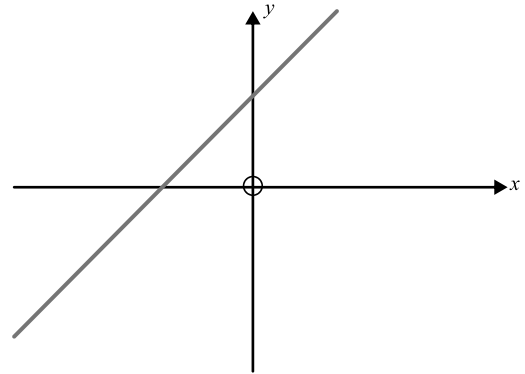
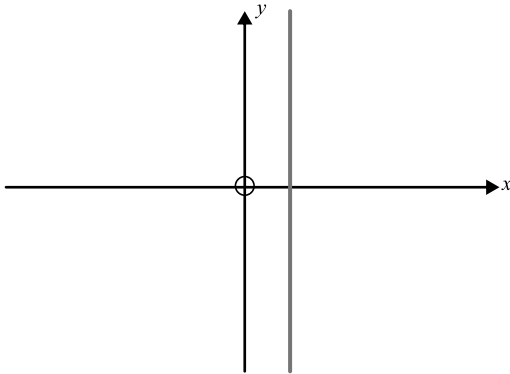
B $y = x + 4$

C $y = 1$

D $y = x^3$

E $y = -x$

F $x = 1$



[4]

21 (a) The ratio of adults:children watching a film at the cinema is 3:5

There are 27 adults watching the film.

Show that 45 children are watching the film.

..... [2]

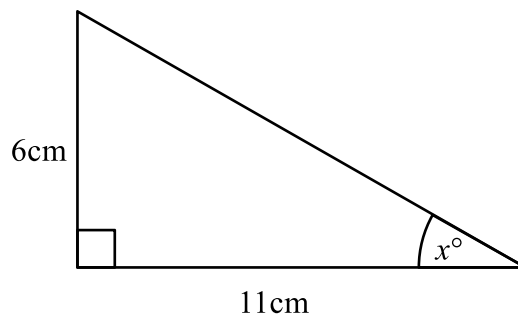
(b) $\frac{3}{5}$ of the children have popcorn.

$\frac{2}{3}$ of the adults have popcorn.

What percentage of the people watching the film have popcorn?

..... [3]

22



Work out the value of x .

Give your answer correct to 3 significant figures

..... [2]

23 (a) Complete this statement.

$$10^7 = \text{-----} \text{ million}$$

[1]

(b) $1000^a \times 100000^b$ can be written in the form 10^k

Show that $k = 3a + 5b$

[2]

24 Frankie invests £7000 in a bank account.

Frankie gets 6% per annum compound interest.

After n years, Frankie has £9367.58

Work out the value of n .

----- [2]

25 A helicopter travels 50km north and then 70km east.

The helicopter then travels directly back to its starting point.

The cost of fuel for the helicopter is £2.50 per km.

What is the cost of the fuel for the helicopter's journey?

----- [4]

26 Solve

$$3a + 2b = 11$$

$$4a - 5b = 30$$

$a =$ -----

$b =$ -----

[3]

27 (a) Circle the reciprocal of 0.4

[1]

4 $\frac{1}{4}$ 2 2.5

(b) $x = 5.3$ to 2 significant figures

Complete the error interval for x

[2]

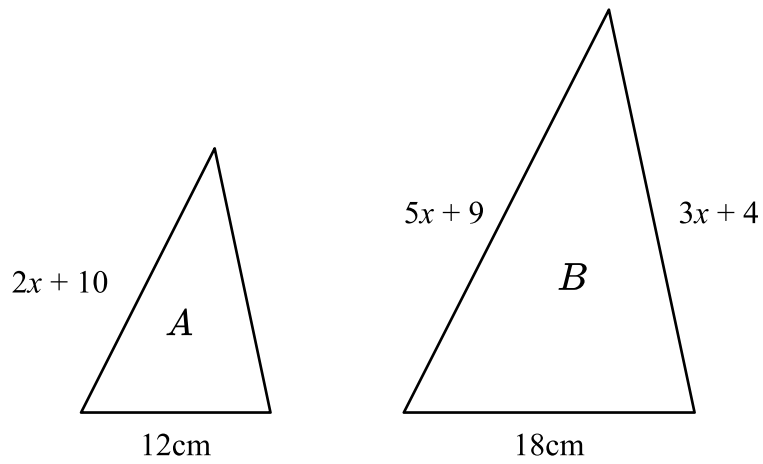
Answer $\leq x <$

28 The bearing of A from B is 121° .

What is the bearing of B from A ?

..... [2]

29 Triangles A and B are similar triangles.



Work out the perimeter of triangle B .

..... [5]


End of Questions

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