Candidate surname	Other names

Maths Planner

AQA

2024 Practice Paper

Mathematics

PAPER 2 (Calculator)

Foundation Tier

Time 1 hour 30 minutes

Caution: These topics are not guaranteed to show up, please focus on all topic areas. They have been selected using analysis on previous official exam papers.

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Total Marks

80

Q	Topic(s)	Marks
1	FDP	/ 1
2	Percentages of Amounts	/ 1
3	Converting Metric Units	/ 1
4	Circle Properties	/ 1
5	Factors and Multiples	/ 1
6	Bank Statements	/ 3
7	Equations / Expressions / Inequalities	/ 2
8	Substitution	/ 1
9	Averages / Range	/ 5
10	Time Calculations	/ 2
11	Direct Proportion	/ 4
12	Area and Perimeter	/ 5
13	Money Problem	/ 4
14	Sequences	/ 4
15	Probability	/ 5

Q	Topic(s)	Marks
16	Volume	/ 3
17	Reflections	/ 2
18	Angles in Triangles / Solving Equations	/ 3
19	Similar Shapes	/ 2
20	Primes / Cubes / Triangular Numbers	/ 2
21	Ratio	/ 4
22	Reverse Percentages	/ 2
23	Angles in Parallel Lines	/ 2
24	Calculating with Speed	/ 4
25	Circles and Polygons	/ 3
26	Compound / Simple Interest	/ 4
27	Trigonometry / Pythagoras	/ 4
28	Equation of a Straight Line	/ 5

Maths Planner

Student Warning

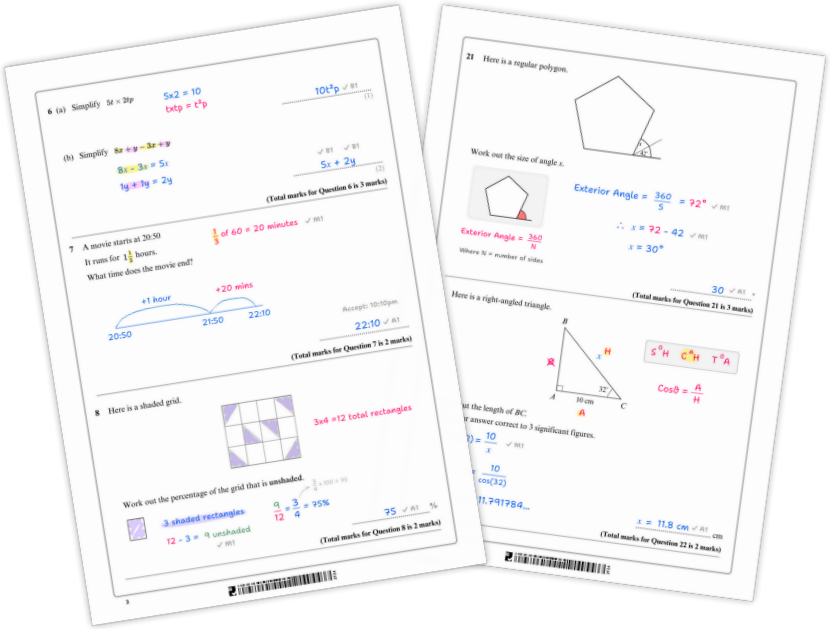
The questions in this paper will not be in the exam

These topics are **not guaranteed** to show up in your Paper 2 exam. Please make sure to revise **all topic areas**, especially since topics covered in Paper 1 can still come up.

These questions have been selected using analysis on previous official exam papers.

Worked Solutions

SCAN ME



Answers all questions in the spaces provided.

Do not write outside the box

1 Write $\frac{7}{8}$ as a decimal.

[1 mark]

Answer _____

2 Work out 30% of $90.

[1 mark]

_____

_____

Answer $ _____

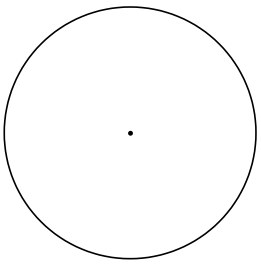
3 Write $1\frac{1}{2}$ metres in centimetres.

[1 mark]

Answer _____ cm

4 On the circle below, draw a **tangent** line**.**

[1 mark]



Do not write outside the box

5 Circle the factor of 12

[1 mark]

5 24 48 4

6 Complete the bank statement.

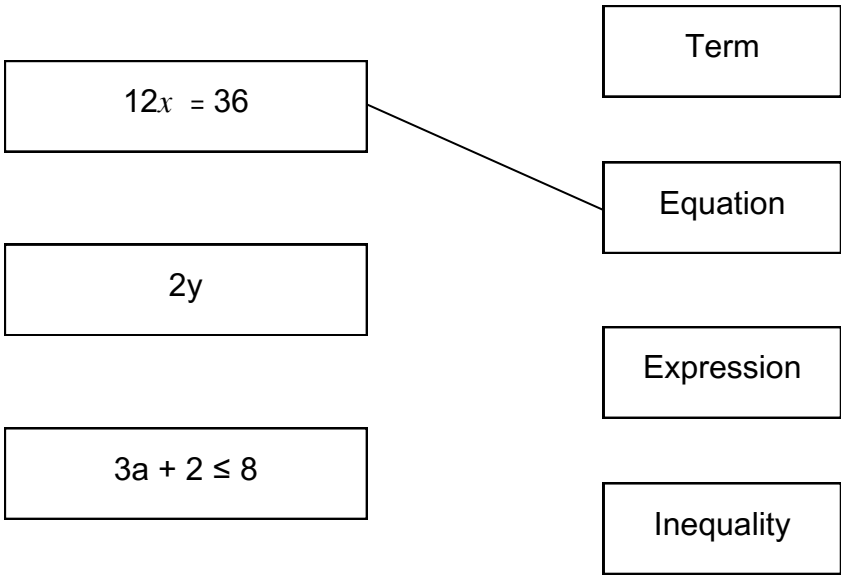
[3 marks]

Date	Description	Credit (£)	Debit (£)	Balance (£)
01.06.23	Starting Balance			450.00
04.06.23	Salary	1800.00		_____
06.06.23	Utility bill		100.50	2149.50
10.06.23	Grocery shopping		_____	2026.10
15.06.23	Car maintenance		300.00	_____
20.06.23	Gift from friend	75.00		1801.10

Do not write outside the box

7 Match the algebra to the correct description.
One has been done for you.

[2 marks]



8 If x = -2

Circle the value of $3x^2$

[1 mark]

-36 12 36 1

Do not write outside the box

9 The table shows information of the temperatures in some cities.

City	Temprature
Cairo	21˚C
Moscow	-12˚C
New Delhi	16˚C
Helsinki	-5˚C

9 (a) Work out the **range** of temperatures of the cities. **[1 mark]**

Answer _____ ˚C

9 (b) Work out the **median** temperature of the cities. **[2 marks]**

Answer _____ ˚C

9 (c) Work out the **mean** temperature of the cities. **[2 marks]**

_____

_____

Answer _____ ˚C

Do not write outside the box

10 A train left station **A** at 09:42

It took 38 minutes to arrive at station **B**,
where it waits for 8 minutes before leaving.

The train arrived at station **C** at 11:45.

Work out the time of the train journey between station **B** and **C.**

[2 marks]

Answer _____

11 At a butchers

5kg of chicken costs £57.
2kg of chicken and 800g of beef steak cost £41.20.

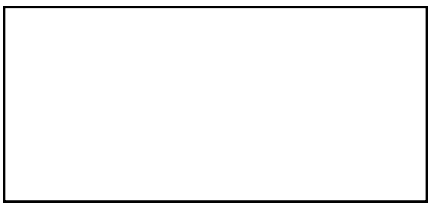
Work out the total cost for 500g of chicken and 1.5kg of beef steak.

[4 marks]

Answer £ _____

Do not write outside the box

12 Here is a rectangle.



12 (a) Write an expression for the **area** of the rectangle.
Give your answer in its simplest form.

[2 marks]

Answer _____

12 (b) Write an expression for the **perimeter** of the rectangle.
Give your answer in its simplest form.

[3 marks]

Answer _____

Do not write outside the box

13 A group of three friends went on holiday.
The total cost for all three was £3600.

32% was spent on flights

$\frac{2}{5}$ was spent on hotels

the remainder was spending money

Given the costs were split equally between them,
Work out how much spending money each friend had.

[4 marks]

Answer £ _____

Do not write outside the box

14 Here are the first 5 terms of **Sequence A**, which follows the Fibonacci pattern.

2 5 7 12 19

14 (a) Write down the next term in the sequence.

[1 mark]

Answer _____

14 (b) Here is the first 3 terms of **Sequence B**.

3 6 12

Given **Sequence B** is **geometric**.

Work out which sequence will have a term greater than 50 first.

[3 marks]

_____

_____

_____

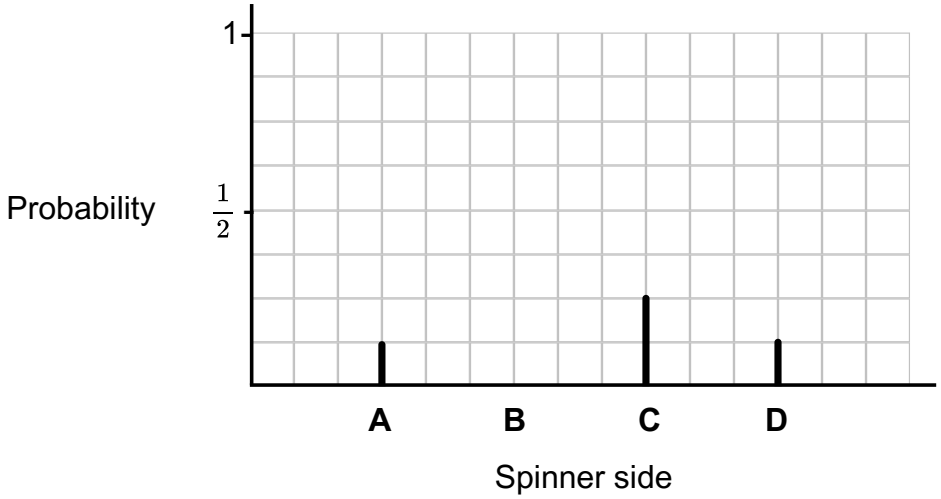
_____

_____

Answer **Sequence** _____ **Term** _____

Do not write outside the box

15 A 4-sided biased spinner can land on either **A**, **B**, **C** or **D**.
The probabilities are shown on the chart below.



15 (a) Write down the probability the spinner will land on **D**.

[1 mark]

Answer _____

15 (b) Complete the chart for spinner side **B**.

[2 marks]

15 (c) The spinner will be spun 28 times.
How many times is the spinner expected to land on **C**?

[2 marks]

_____

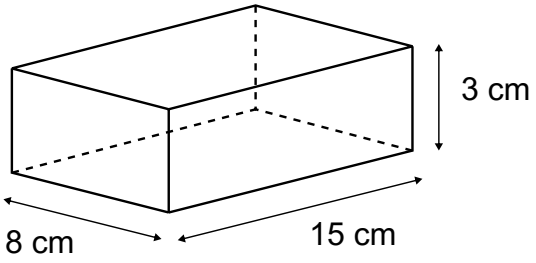
_____

_____

Answer _____

Do not write outside the box

16 Here is a cuboid.



16 (a) Circle the number **vertices** the cuboid has.

[1 mark]

8 6 12 4

16 (b) Work out the volume of the cuboid.

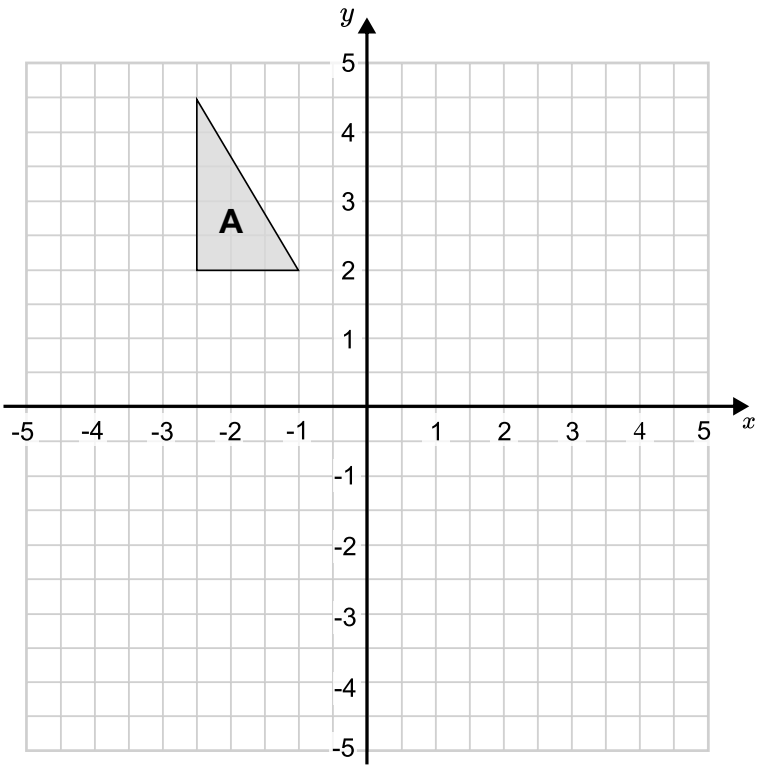
[2 marks]

Answer _____ cm^3

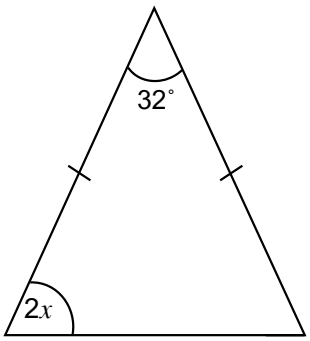
Do not write outside the box

17 Reflect triangle **A** in the line $x = 1$
Label your image **B**.

[2 marks]



18 Here is a triangle.



Work out the value of x.

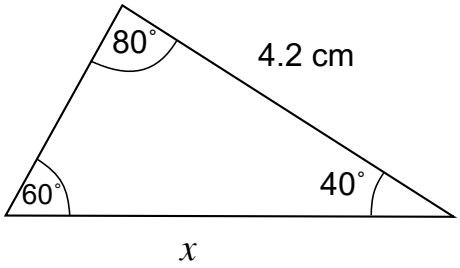
[3 marks]

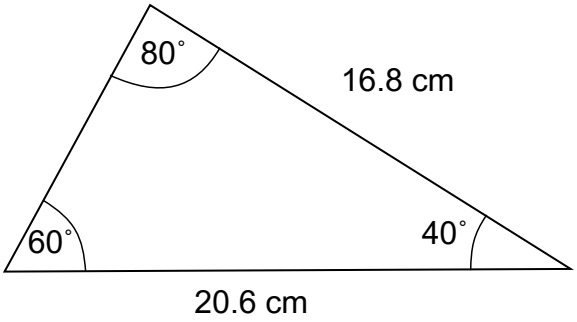
Answer $x =$ _____ °

Do not write outside the box

19 Here are two scalene triangles.

Not drawn accurately





Work out the size of length x.

[2 marks]

Answer x = _____ cm

20 Sam is thinking of a single digit integer, which is **both** prime and triangular.

Work out the value of this integer cubed.

[2 marks]

Answer _____

Do not write outside the box

21 (a) Write 8 : 12 in the form 1 : n

[1 mark]

Answer _____

21 (b) Tony and Sarah have money saved in the ratio 7 : 11

Sarah has saved £24 more than Tony.

Work out how much they have saved in total.

[3 marks]

Answer £ _____

Do not write outside the box

22 A gaming PC has a **discount** of 25%.
The discount price is £2062.50
Work out the original price before the sale.

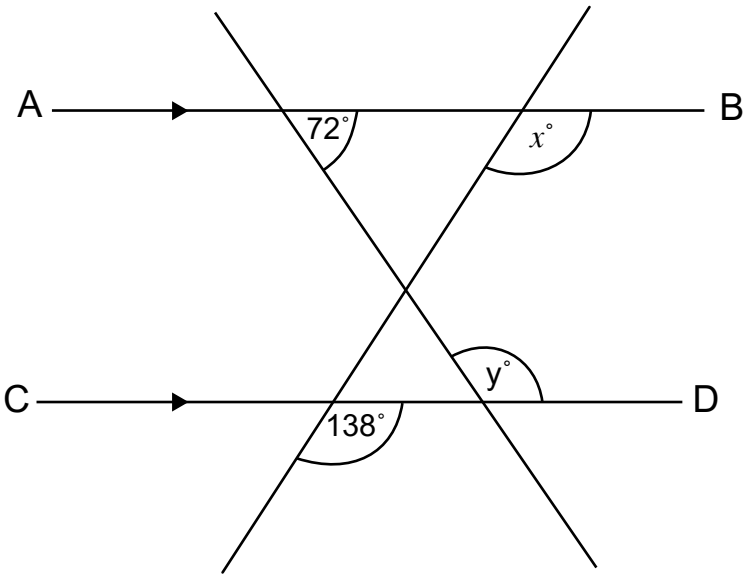
[2 marks]

Answer £ _____

Do not write outside the box

23 AB and BC are parallel lines.

Not drawn accurately



23 (a) Work out the size of angle x.

[1 mark]

Answer _____ °

23 (b) Work out the size of angle y.

[1 mark]

Answer _____ °

Do not write outside the box

24 Josh is competing in a 20 mile race.
He must **run the first half** and then cycle the remaining half.

After **24 minutes**, Josh looks at his fitness watch and reads he has ran **1.8 miles**.

He continues this pace until he reaches the half way point.

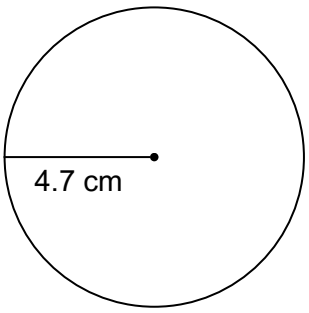
Work out exactly how long the first half of the race takes Josh to complete.
Give your answer in, hours, minutes and seconds.

[4 marks]

Answer _____ hrs _____ mins _____ secs

Do not write outside the box

25 (a) Here is a circle.



Not drawn accurately

Work out the area of the circle.

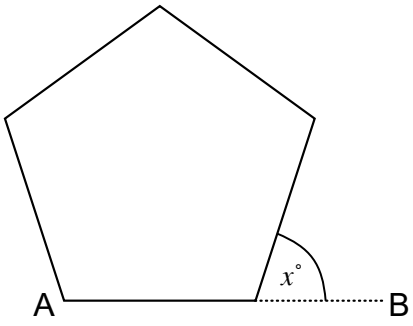
Give your answer to the nearest integer.

[2 mark]

Answer _____ cm²

25 (b) Here is a regular polygon.

AB is a straight line.



Not drawn accurately

Work out the size of angle x.

[1 mark]

Answer x = _____ °

Do not write outside the box

26 Joanne wants to invest **£3800** into a high interest savings account.

These are the two banks she is considering.

Zupa Bank	**Sterling Bank**
Compound Interest Rates:	Simple Interest Rates:
6% for the **first** 6 months 3.2% per annum thereafter	3.8% per annum

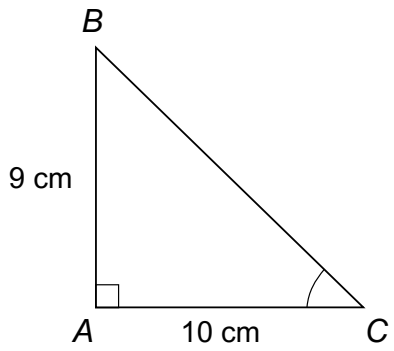
Work out the difference in interest Joanne would earn between the two banks after **4 years**.

[4 marks]

Answer £ _____

Do not write outside the box

27 Here is a right-angled triangle.



Not drawn accurately

27 (a) Work out the size of angle *ACB.*

Give your answer correct to 1 decimal place.

[2 marks]

Answer _____ °

27 (b) Work out the size of length *BC.*

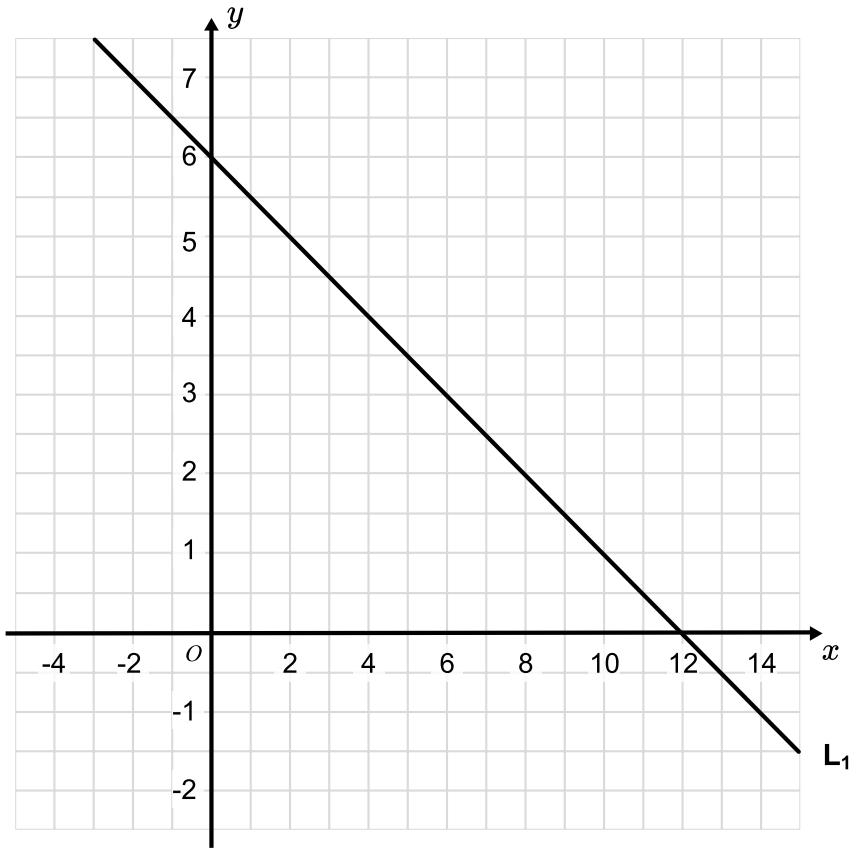
Give your answer correct to 3 significant figures.

[2 marks]

Answer _____ cm

Do not write outside the box

28 The line L_1 is shown on the grid.



28 (a) Write down the equation of the line L_1 in the form $y = mx + c$

[2 marks]

Answer _____

28 (b) The line L_2 is parallel to L_1 , and passes through the point (4, -6)

Write down the equation for the line L_2 in the form $y = mx + c$

[3 marks]

_____

_____

_____

Answer _____

END OF QUESTIONS