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Boost Your Skills & Grades in Grade 9 Maths

4MA1 June 2027 Paper 1F Best Guess Paper

Foundation · Target Grade 5 · Question Paper

Disclaimer

This independently compiled practice paper is for students preparing for Pearson Edexcel International GCSE Mathematics A (4MA1), Foundation Tier, Paper 1F. A calculator may be used.

This is not an official Pearson Edexcel examination paper and is not endorsed by Pearson. Best Guess questions are independent practice, not a guarantee of what will appear in the exam.

Revise the full specification. Attempt the matching question paper before using the mark scheme, model answers and practice resources at www.mygrade9mathstutor.com.

If you find this paper helpful, please support me by buying me a coffee

Video walkthrough

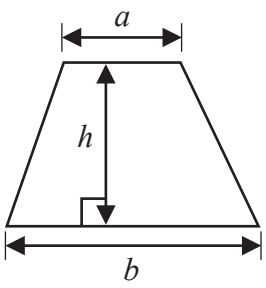
Full walkthrough QR not yet linked.

Calculator allowed · 29 questions · 100 marks · Suggested time: 2 hours.

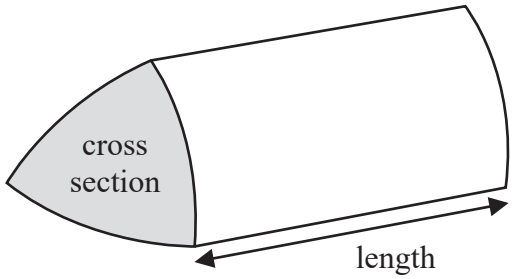
International GCSE Mathematics

Formulae sheet – Foundation Tier

Area of trapezium = $\frac{1}{2}(a + b)h$

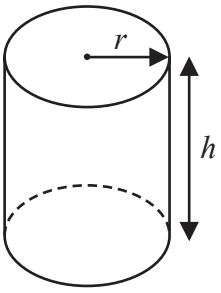


Volume of prism = area of cross section × length



Volume of cylinder = $\pi r^2 h$

Curved surface area of cylinder = $2\pi rh$



Answer ALL 29 questions.
Write your answers in the spaces provided.
You must show all stages of your working.

1 (a) Write the number 47 082 in words.

.....

(1)

(b) Write the following numbers in order of size. Start with the smallest number.

0.405 0.45 0.049 0.4 0.415

.....

(1)

(c) Write 6384 correct to the nearest hundred.

.....

(1)

(d) Write 17.864 correct to 1 decimal place.

.....

(1)

(Total for Question 1 is 4 marks)

Model Solution	Practice Perfect Questions	Progress & Mastery
QR not available yet	Worksheet	☐ Nailed It ☐ Watched Clip ☐ Mastered It ☐ Come Back To It Marks: ____ / 4 Review: ____ / ____ Tracker

2 Here is a list of numbers.

6 9 12 15 21 27 32 49

From the numbers in the list, write down

(a) a multiple of 8

.....

(1)

(b) a factor of 36

.....

(1)

(c) a square number

.....

(1)

(d) a cube number.

.....

(1)

(Total for Question 2 is 4 marks)

Model Solution	Practice Perfect Questions	Progress & Mastery
QR not available yet	Worksheet	☐ Nailed It ☐ Watched Clip ☐ Mastered It ☐ Come Back To It Marks: ____ / 4 Review: ____ / ____ Tracker

3 Fin asks 60 students in Year 10 whether they prefer rugby, football or tennis.
The two-way table gives some information about the results.

	Rugby	Football	Tennis	Total
Boys	14			32
Girls		11	12	
Total	19		18	60

(a) Complete the two-way table.

(3)

(b) One of the 60 students is chosen at random.
Write down the probability that this student is a girl who prefers tennis.

.....

(1)
(Total for Question 3 is 4 marks)

Model Solution	Practice Perfect Questions	Progress & Mastery
QR not available yet	Worksheet	☐ Nailed It ☐ Watched Clip ☐ Mastered It ☐ Come Back To It Marks: ____ / 4 Review: ____ / ____ Tracker

4 (a) Change 3.4 metres into centimetres.

..... cm

(1)

(b) Change 2650 grams into kilograms.

..... kg

(1)

(c) A train leaves Exeter at 14:35 and arrives in Bristol at 15:52.
How long does the journey take? Give your answer in hours and minutes.

..... hours ..... minutes

(1)
(Total for Question 4 is 3 marks)

Model Solution	Practice Perfect Questions	Progress & Mastery
QR not available yet	Worksheet	☐ Nailed It ☐ Watched Clip ☐ Mastered It ☐ Come Back To It Marks: ____ / 3 Review: ____ / ____ Tracker

5 (a) Simplify $5a + 3b - 2a + 7b$.

.....

(2)

(b) $T = 4m - 3n$
Work out the value of T when $m = 6$ and $n = -2$.

T = ...

(2)

(Total for Question 5 is 4 marks)

Model Solution	Practice Perfect Questions	Progress & Mastery
QR not available yet	Worksheet	☐ Nailed It ☐ Watched Clip ☐ Mastered It ☐ Come Back To It Marks: ____ / 4 Review: ____ / ____ Tracker

6 Here are the masses, in kilograms, of 7 parcels.

4.2 5.8 3.5 5.8 6.1 4.9 5.4

(a) Find the range of the masses.

..... kg

(1)

(b) Find the median mass.

..... kg

(2)

(Total for Question 6 is 3 marks)

Model Solution	Practice Perfect Questions	Progress & Mastery
QR not available yet	Worksheet	☐ Nailed It ☐ Watched Clip ☐ Mastered It ☐ Come Back To It Marks: ____ / 3 Review: ____ / ____ Tracker

7 In triangle ABC, $AB = AC$.
BCD is a straight line.
Angle $BAC = 44^\circ$.

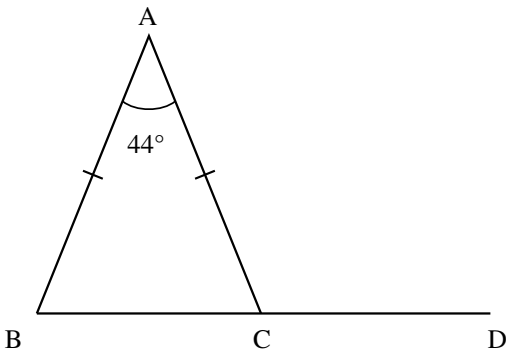


Diagram NOT accurately drawn

Work out the size of angle ACD.
Give a reason for each stage of your working.

..... °

(3)
(Total for Question 7 is 3 marks)

Model Solution	Practice Perfect Questions	Progress & Mastery
QR not available yet	Worksheet	☐ Nailed It ☐ Watched Clip ☐ Mastered It ☐ Come Back To It Marks: ____ / 3 Review: ____ / ____ Tracker

8 Rachel buys 3 notebooks at £2.45 each and 4 pens at £1.30 each.
She has a voucher that gives 15% off the total cost.

Work out how much Rachel pays after using the voucher.
Give your answer to the nearest penny.

£ .....

(4)
(Total for Question 8 is 4 marks)

Model Solution	Practice Perfect Questions	Progress & Mastery
QR not available yet	Worksheet	☐ Nailed It ☐ Watched Clip ☐ Mastered It ☐ Come Back To It Marks: ____ / 4 Review: ____ / ____ Tracker

9 (a) Write the ratio 24 : 36 in its simplest form.

.....

(1)

(b) Sam and Maia share £360 in the ratio 4 : 5.
Work out how much more money Maia gets than Sam.

£ .....

(3)

(Total for Question 9 is 4 marks)

Model Solution	Practice Perfect Questions	Progress & Mastery
QR not available yet	Worksheet	☐ Nailed It ☐ Watched Clip ☐ Mastered It ☐ Come Back To It Marks: ____ / 4 Review: ____ / ____ Tracker

10 A trapezium has parallel sides of length 7 cm and 11 cm.
The area of the trapezium is 72 cm^2.

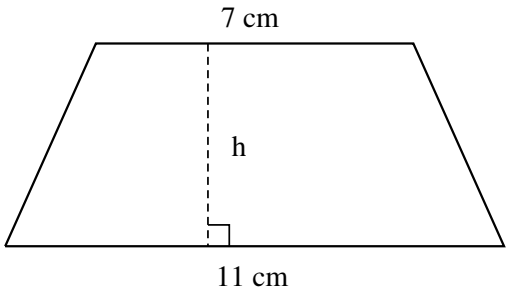


Diagram NOT accurately drawn

Work out the perpendicular height of the trapezium.

..... cm

(3)

(Total for Question 10 is 3 marks)

Model Solution	Practice Perfect Questions	Progress & Mastery
QR not available yet	Worksheet	☐ Nailed It ☐ Watched Clip ☐ Mastered It ☐ Come Back To It Marks: ____ / 3 Review: ____ / ____ Tracker

11 (a) Simplify $p^6 \times p^4$.

.....

(1)

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

.....

(1)

(c) Simplify $\frac{r^4}{r^9}$

Give your answer as a single power of r.

.....

(1)

(Total for Question 11 is 3 marks)

Model Solution	Practice Perfect Questions	Progress & Mastery
QR not available yet	Worksheet	☐ Nailed It ☐ Watched Clip ☐ Mastered It ☐ Come Back To It Marks: ____ / 3 Review: ____ / ____ Tracker

12 Make r the subject of the formula $v = kr - h$.

r = ...

(2)

(Total for Question 12 is 2 marks)

Model Solution	Practice Perfect Questions	Progress & Mastery
QR not available yet	Worksheet	☐ Nailed It ☐ Watched Clip ☐ Mastered It ☐ Come Back To It Marks: ____ / 2 Review: ____ / ____ Tracker

13 Write 124 as a product of its prime factors.

.....

(2)

(Total for Question 13 is 2 marks)

Model Solution	Practice Perfect Questions	Progress & Mastery
Clip	Worksheet	☐ Nailed It ☐ Watched Clip ☐ Mastered It ☐ Come Back To It Marks: ____ / 2 Review: ____ / ____ Tracker

14 Show that $3\frac{1}{5} \times 2\frac{5}{8} = 8\frac{2}{5}$

(3)
(Total for Question 14 is 3 marks)

Model Solution	Practice Perfect Questions	Progress & Mastery
Clip	Worksheet	☐ Nailed It ☐ Watched Clip ☐ Mastered It ☐ Come Back To It Marks: ____ / 3 Review: ____ / ____ Tracker

15 A bag contains only blue counters, yellow counters, black counters, and orange counters.
The table gives each of the probabilities that, when a counter is taken at random from the bag, the counter will be black or the counter will be orange.

Counter	Blue	Yellow	Black	Orange
Probability			0.15	0.45

The ratio of the number of blue counters to the number of yellow counters is 3 : 5.
There are 54 orange counters in the bag.
Work out the number of blue counters in the bag.

.....

(3)
(Total for Question 15 is 3 marks)

Model Solution	Practice Perfect Questions	Progress & Mastery
Clip	Worksheet	☐ Nailed It ☐ Watched Clip ☐ Mastered It ☐ Come Back To It Marks: ____ / 3 Review: ____ / ____ Tracker

16 The length of a table is measured as 1.6 metres correct to one decimal place.

(a) Write down the upper bound of the length of the table.

..... m

(1)

(b) Write down the lower bound of the length of the table.

..... m

(1)

(Total for Question 16 is 2 marks)

Model Solution	Practice Perfect Questions	Progress & Mastery
Clip	Worksheet	☐ Nailed It ☐ Watched Clip ☐ Mastered It ☐ Come Back To It Marks: ____ / 2 Review: ____ / ____ Tracker

17 (a) Expand and simplify $3(2x - 5) - 2(x + 4)$.

.....

(2)

(b) Factorise fully $18a^2b - 12ab^2$.

.....

(2)

(c) Solve the inequality $5y - 3 > 2y + 12$.

.....

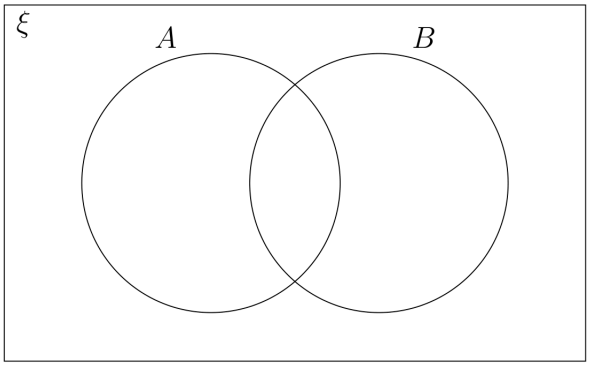
(2)

(Total for Question 17 is 6 marks)

Model Solution	Practice Perfect Questions	Progress & Mastery
Clip	Worksheet	☐ Nailed It ☐ Watched Clip ☐ Mastered It ☐ Come Back To It Marks: ____ / 6 Review: ____ / ____ Tracker

18 The universal set $\xi = \{1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12\}$.
$A = \{\text{prime numbers in } \xi\}$; $B = \{\text{multiples of 3 in } \xi\}$.

(a) Complete the Venn diagram to represent this information.



(3)

(b) A number is chosen at random from ξ.
Find the probability that it is in $A \cup B$.

.....

(1)
(Total for Question 18 is 4 marks)

Model Solution	Practice Perfect Questions	Progress & Mastery
Clip	Worksheet	☐ Nailed It ☐ Watched Clip ☐ Mastered It ☐ Come Back To It Marks: ____ / 4 Review: ____ / ____ Tracker

19 Here are the first five terms of an arithmetic sequence:

7 11 15 19 23

(a) Find an expression, in terms of n, for the nth term of this sequence.

.....

(2)

(b) Show that 87 is a term in this sequence.

(2)
(Total for Question 19 is 4 marks)

Model Solution	Practice Perfect Questions	Progress & Mastery
Clip	Worksheet	☐ Nailed It ☐ Watched Clip ☐ Mastered It ☐ Come Back To It Marks: ____ / 4 Review: ____ / ____ Tracker

20 The table shows information about the heights, h cm, of 40 plants.

Height (h cm)	Frequency
$10 < h \leq 20$	8
$20 < h \leq 30$	14
$30 < h \leq 40$	12
$40 < h \leq 50$	6

(a) Write down the modal class interval.

.....

(1)

(b) Calculate an estimate for the mean height of the plants.

..... cm

(3)

(Total for Question 20 is 4 marks)

Model Solution	Practice Perfect Questions	Progress & Mastery
Clip	Worksheet	☐ Nailed It ☐ Watched Clip ☐ Mastered It ☐ Come Back To It Marks: ____ / 4 Review: ____ / ____ Tracker

21 Solve $\frac{7x - 2}{4} = 3x + 1$

Show clear algebraic working.

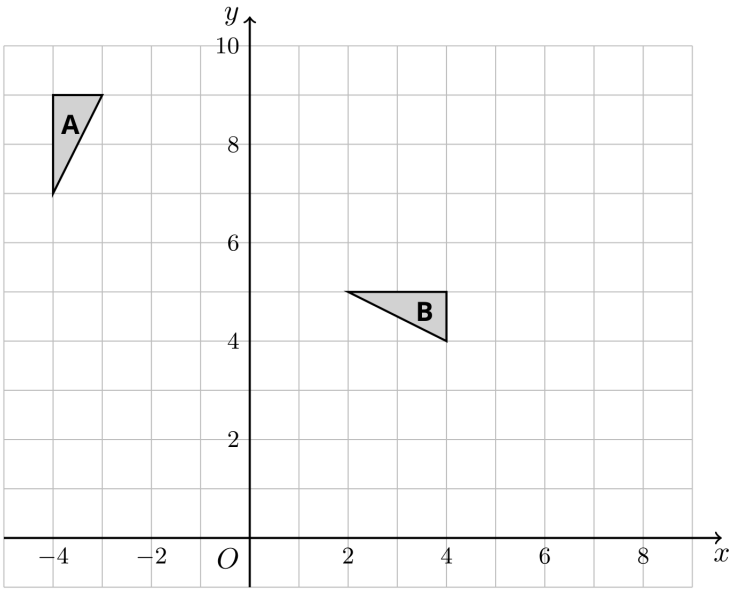
x = ...

(4)

(Total for Question 21 is 4 marks)

Model Solution	Practice Perfect Questions	Progress & Mastery
Clip	Worksheet	☐ Nailed It ☐ Watched Clip ☐ Mastered It ☐ Come Back To It Marks: ____ / 4 Review: ____ / ____ Tracker

22



(a) Describe fully the single transformation that maps triangle A onto triangle B.

.....

(3)

(b) On the grid, translate triangle A by the vector $\begin{pmatrix} 2 \\ -5 \end{pmatrix}$.

Label the new triangle C.

(1)

(Total for Question 22 is 4 marks)

Model Solution	Practice Perfect Questions	Progress & Mastery
QR not available yet	Worksheet	☐ Nailed It ☐ Watched Clip ☐ Mastered It ☐ Come Back To It Marks: ____ / 4 Review: ____ / ____ Tracker

23 Change a speed of 90 kilometres per hour to a speed in metres per second.
Show your working clearly.

..... m/s

(2)

(Total for Question 23 is 2 marks)

Model Solution	Practice Perfect Questions	Progress & Mastery
Clip	Worksheet	☐ Nailed It ☐ Watched Clip ☐ Mastered It ☐ Come Back To It Marks: ____ / 2 Review: ____ / ____ Tracker

24 Zoe wants to make a total of 180 bags of beads to sell at a fair.
She will make small bags and large bags where

number of small bags : number of large bags = 7 : 5

Each small bag will contain 65 grams of beads.
Each large bag will contain 145 grams of beads.

Zoe thinks she will need less than 17 kilograms of beads to fill 180 bags.

Is Zoe correct?
You must show how you get your answer.

(4)

(Total for Question 24 is 4 marks)

Model Solution	Practice Perfect Questions	Progress & Mastery
Clip	Worksheet	☐ Nailed It ☐ Watched Clip ☐ Mastered It ☐ Come Back To It Marks: ____ / 4 Review: ____ / ____ Tracker

25 A solid cylinder has a radius of 5.4 cm.
The volume of the cylinder is 1100 cm^3.

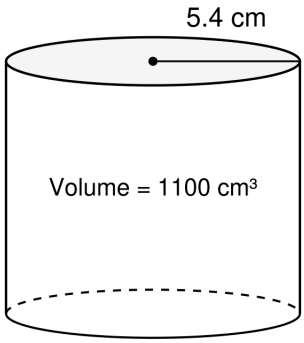


Diagram NOT accurately drawn

Calculate the total surface area of the cylinder.
Give your answer correct to 3 significant figures.

..... cm^2

(4)

(Total for Question 25 is 4 marks)

Model Solution	Practice Perfect Questions	Progress & Mastery
Clip	Worksheet	☐ Nailed It ☐ Watched Clip ☐ Mastered It ☐ Come Back To It Marks: ____ / 4 Review: ____ / ____ Tracker

26 Sophie is building a curved garden path. The path, shown shaded in the diagram, is the region between two semicircles.

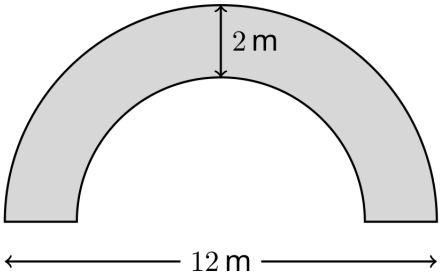


Diagram **NOT** accurately drawn

The diameter of the outer semicircle is 12 m.
The path has a constant width of 2 m.

Calculate the area of the path.
Give your answer as a multiple of π.

..... m^2

(3)

(Total for Question 26 is 3 marks)

Model Solution	Practice Perfect Questions	Progress & Mastery
Clip	Worksheet	☐ Nailed It ☐ Watched Clip ☐ Mastered It ☐ Come Back To It Marks: ____ / 3 Review: ____ / ____ Tracker

27 Find the equation of the line that passes through (2, 5) and (6, 17).
Give your answer in the form $y = mx + c$.

.....

(3)

(Total for Question 27 is 3 marks)

Model Solution	Practice Perfect Questions	Progress & Mastery
Clip	Worksheet	☐ Nailed It ☐ Watched Clip ☐ Mastered It ☐ Come Back To It Marks: ____ / 3 Review: ____ / ____ Tracker

28 Solve the simultaneous equations.
Show clear algebraic working.

$$3x + 2y = 14$$
$$5x - 3y = 17$$

x = ... y = ...

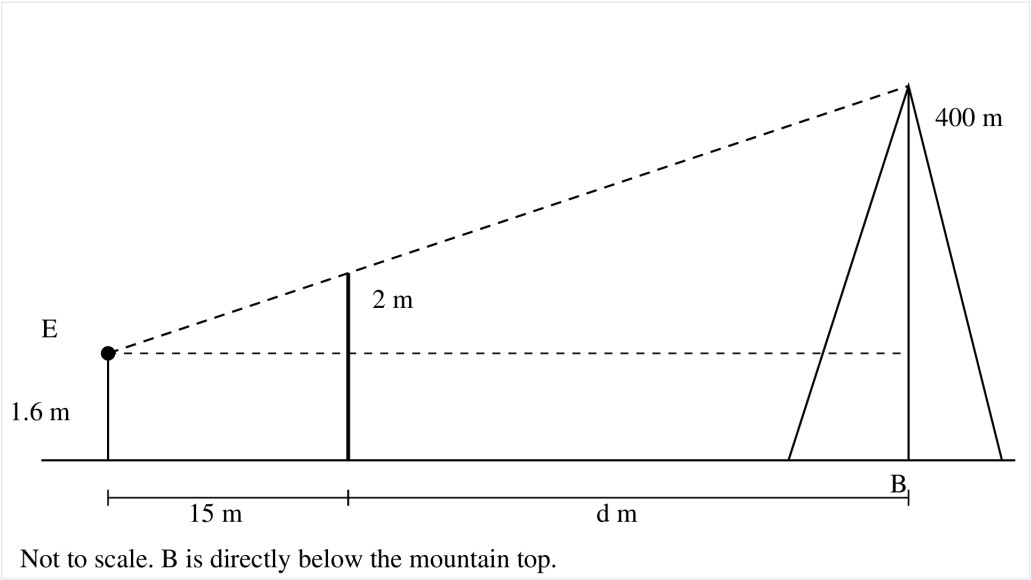
(3)

(Total for Question 28 is 3 marks)

Model Solution	Practice Perfect Questions	Progress & Mastery
Clip	Worksheet	☐ Nailed It ☐ Watched Clip ☐ Mastered It ☐ Come Back To It Marks: ____ / 3 Review: ____ / ____ Tracker

29 Katie's eye level is at 1.6 m above the ground. She is looking at a mountain that she knows is 400 m tall. There is a 2 m tall pine tree between her and the mountain.

When she is standing 15 m away from the base of the tree, the top of the mountain is just hidden by the top of the pine tree. All measurements have been taken from level ground.



Not to scale. B is directly below the mountain top.

Calculate how far the mountain is from the other side of the tree.

..... m

(4)

(Total for Question 29 is 4 marks)

Model Solution	Practice Perfect Questions	Progress & Mastery
Clip	Worksheet	☐ Nailed It ☐ Watched Clip ☐ Mastered It ☐ Come Back To It Marks: ____ / 4 Review: ____ / ____ Tracker

END OF PAPER

MYGRADE9MATHS TUTOR • PROGRESS & MASTERY RECORD

4MA1 June 2027 Paper 1F — Success Tracker

International GCSE Mathematics A • Foundation Tier (Target Grade 5)

Name: _____

Date Started: _____

How to build exam confidence (no totals or percentages needed): Tick **Nailed It** when you solve a question right first time. If you get stuck, scan the QR code and tick **Watched Clip**. Once you complete the Practice Perfect set and re-solve the question cold, tick **Mastered It**—every tick here is a topic you turned from a gap into a strength.

Q#	Topic Focus	Nailed It	Watched Clip	Mastered It	Come Back	Marks
1	Number Words, Ordering Decimals & Rounding	☐	☐	☐	☐	/ 4
2	Multiples, Factors, Square & Cube Numbers	☐	☐	☐	☐	/ 4
3	Two-Way Tables & Conditional Probability	☐	☐	☐	☐	/ 4
4	Metric Unit Conversions & Time Intervals	☐	☐	☐	☐	/ 3
5	Collecting Like Terms & Formula Substitution	☐	☐	☐	☐	/ 4
6	Range & Median from a Data List	☐	☐	☐	☐	/ 3
7	Angles in Isosceles Triangles & Straight Lines	☐	☐	☐	☐	/ 3
8	Shopping Costs & Percentage Discount	☐	☐	☐	☐	/ 4
9	Simplifying & Sharing in a Two-Part Ratio	☐	☐	☐	☐	/ 4
10	Area & Height of a Trapezium	☐	☐	☐	☐	/ 3
11	Laws of Indices (Multiplying, Powers & Division)	☐	☐	☐	☐	/ 3
12	Changing the Subject of a Linear Formula	☐	☐	☐	☐	/ 2
13	Product of Prime Factors	☐	☐	☐	☐	/ 2
14	Multiplying Mixed Numbers (Show That)	☐	☐	☐	☐	/ 3
15	Probability & Ratio Combined Problem	☐	☐	☐	☐	/ 3
16	Upper & Lower Bounds of Measurement	☐	☐	☐	☐	/ 2
17	Expanding, Factorising & Linear Inequalities	☐	☐	☐	☐	/ 6
18	Venn Diagrams, Set Notation & Probability	☐	☐	☐	☐	/ 4
19	Linear Sequences (*n*th Term & Term Check)	☐	☐	☐	☐	/ 4
20	Modal Class & Estimated Mean from Grouped Data	☐	☐	☐	☐	/ 4
21	Solving Linear Equations with Fractions	☐	☐	☐	☐	/ 4
22	Transformations (Rotation & Vector Translation)	☐	☐	☐	☐	/ 4
23	Compound Speed Conversion (km/h to m/s)	☐	☐	☐	☐	/ 2
24	Sharing in a Ratio & Mass Unit Conversions	☐	☐	☐	☐	/ 4
25	Cylinder Volume & Total Surface Area	☐	☐	☐	☐	/ 4
26	Area of a Semicircular Garden Path (in Terms of π)	☐	☐	☐	☐	/ 3
27	Equation of a Straight Line Through Two Points	☐	☐	☐	☐	/ 3
28	Linear Simultaneous Equations	☐	☐	☐	☐	/ 3
29	Similar Triangles in Practical Context	☐	☐	☐	☐	/ 4

HABIT & SUCCESS MILESTONES (TICK AS YOU COMPLETE THEM)

☐ Attempted every question (Q1–Q29) ☐ Watched clips for tough topics ☐ Cleared all "Come Back" boxes

Biggest win on this paper (a topic I couldn't do before, but can do now): _____