Mark Scheme (Results)

Summer 2025

End of Year Assessment

In Mathematics

Core (Non-Calculator) Paper 1

Mathematics Mastery

General marking guidance

1 All pupils must receive the same treatment.
Where some judgement is required, mark schemes will provide the principles by which marks will be awarded; exemplification/indicative content will not be exhaustive. When markers are in doubt regarding the application of the mark scheme to a pupil's response, the response should be sent to the Head of Department or Network Lead for review.

2 All the marks on the mark scheme are designed to be awarded; mark schemes should be applied positively. Markers should also be prepared to award zero marks if the pupil's response is not worthy of credit according to the mark scheme. If there is a wrong answer (or no answer) indicated on the answer line always check the working in the body of the script (and on any diagrams), and award any marks appropriate from the mark scheme.

Questions where working is not required: In general, the correct answer should be given full marks.
Questions that specifically require working: In general, pupils who do not show working on this type of question will get no marks – full details will be given in the mark scheme for each individual question.

3 **Crossed out work**
This should be marked **unless** the pupil has replaced it with an alternative response.

4 **Choice of method**
If there is a choice of methods shown, mark the method that leads to the answer given on the answer line.
If no answer appears on the answer line, mark both methods **then award the lower number of marks.**

5 **Incorrect method**
If it is clear from the working that the "correct" answer has been obtained from incorrect working, award 0 marks. Send the response to review for your Head of Department to check.

6 **Follow through marks**
Follow through marks which involve a single stage calculation can be awarded without working as you can check the answer, but if ambiguous do not award.
Follow through marks which involve more than one stage of calculation can only be awarded on sight of the relevant working, even if it appears obvious that there is only one way you could get the answer given.

7 **Ignoring subsequent work**
It is appropriate to ignore subsequent work when the additional work does not change the answer in a way that is inappropriate for the question or its context. (eg an incorrectly cancelled fraction when the unsimplified fraction would gain full marks).
It is not appropriate to ignore subsequent work when the additional work essentially makes the answer incorrect (e.g. incorrect algebraic simplification).

8 **Probability**
Probability answers must be given as a fraction, percentage or decimal. If a pupil gives a decimal equivalent to a probability, this should be written to at least 2 decimal places (unless tenths).
Incorrect notation should lose the accuracy marks, but be awarded any implied method marks.
If a probability fraction is given then cancelled incorrectly, ignore the incorrectly cancelled answer.

9 Linear equations

Unless indicated otherwise in the mark scheme, full marks can be gained if the solution alone is given on the answer line, or otherwise unambiguously identified in working (without contradiction elsewhere). Where the correct solution only is shown substituted, but not identified as the solution, the accuracy mark is lost but any method marks can be awarded (embedded answers).

10 Range of answers

Unless otherwise stated, when an answer is given as a range (e.g. 3.5 – 4.2) then this is inclusive of the end points (eg 3.5, 4.2) and all numbers within the range

11 Number in brackets after a calculation

Where there is a number in brackets after a calculation e.g. 2 × 6 (=12) then the mark can be awarded **either** for the correct method, implied by the calculation **or** for the correct answer to the calculation.

12 Use of inverted commas

Some numbers in the mark scheme will appear inside inverted commas e.g. "12" × 50 ; the number in inverted commas cannot be any number – it must come from a correct method or process but the pupil may make an arithmetic error in their working.

13 Word in square brackets

Where a word is used in square brackets e.g. [area] × 1.5 : the value used for [area] does **not** have to come from a correct method or process but is the value that the pupil believes is the area. If there are any constraints on the value that can be used, details will be given in the mark scheme.

14 Misread

If a pupil misreads a number from the question. e.g. uses 252 instead of 255; method or process marks may be awarded provided the question has not been simplified. Markers should send any instance of a suspected misread to review.

Guidance on the use of abbreviations within this mark scheme	
M	method mark awarded for a correct method or partial method
P	process mark awarded for a correct process as part of a problem solving question
A	accuracy mark (awarded after a correct method or process; if no method or process is seen then full marks for the question are implied but see individual mark schemes for more details)
C	communication mark awarded for a fully correct statement(s) with no contradiction or ambiguity
B	unconditional accuracy mark (no method needed)
oe	or equivalent
cao	correct answer only
ft	follow through (when appropriate as per mark scheme)
sc	special case
dep	dependent (on a previous mark)
indep	independent
awrt	answer which rounds to
isw	ignore subsequent working

Y7 End of Year Assessment 2025 Core Paper 1: Non-calculator

Question		Answer	Mark	Mark scheme	Additional guidance
1		23,018	B1	cao	
2	(a)	377	A1	cao	
	(b)	126	M1 A1	for attempting to exchange cao	This mark can be awarded even if the exchange is incorrect
3		$-9, -5, -2, 0, 3, 4$	A1	cao	
4	(a)	$5x$	B1	cao	x^5 gets no marks, where 5 is clearly a power
	(b)	$4m$	B1	cao	
	(c)	$7a + 4b$	M1 A1	for method to collect terms e.g. $7a$ or $4b$ cao	
5	(a)	1000	A1	cao	
	(b)	30.25	A1	cao	
6	(a)	The angle is acute	C1	'Acute' seen **or** angle estimated to be approx. 30° **or** written explanation of angle being less than 90°	This mark can be awarded without reference to 150° being obtuse
	(b)	20	M1 A1	Method to find the missing angle e.g. $35 + 35 = 70$ $90 - 70$ 20	
7	(a)	$\frac{5}{7}$	A1	cao	
	(b)	$\frac{5}{8}$	M1 A1	for finding two fractions with a correct common denominator, with at least one corresponding numerator e.g. $\frac{6}{8}, \frac{1}{8}$ for $\frac{5}{8}$ oe	Ignore errors in cancelling following sight of an equivalent fraction to $\frac{5}{8}$

8		-12	B1	cao	
9	(a)	$(2, 3)$	B1	cao	
	(b)	Point at $(-2, 1)$	B1	cao	Allow without label provided unambiguous; allow if the cross is nearer to (-2, 1) than other points
	(c)	Line drawn	B1	cao	Label not required, allow hand-drawn line. Allow any length provided intention is clear.
10		Explanation given	C1	**Possible explanations** Tabitha has multiplied by 2 Tabitha has not multiplied by itself Tabitha has done 4×2 instead of 4×4	
11		Rectangle with area 12 drawn	M1 A1	for complete method to find area of triangle e.g. $\frac{1}{2} \times 6 \times 4 \ (= 12)$ for correct diagram on grid	
12		No, she will get £3.50 change	M1 M1 A1	For method to find the total e.g. $1.20 + 0.70 + 2.30 + 2.30 \ (OR \ 4.60) = 6.50$ for method to find the change from £10 e.g. $10 - 6.50 = 3.50$ No, she will get £3.50	
13		2304	A1	cao	
14	(a)	Explanation	C1	**Possible explanations** Jessica has mistaken the vertex angle for one of the equal angles. the base angles here are not opposite the equal sides. the angles that are equal are angle z and the top angle. calculation to find the angle z, $\frac{180-4}{2} = 70°$ 40 is not a base angle	Accept if labelled on diagram. e.g. $z = 70°$
	(b)	43	A1	cao	
15	(a)	-8	A1	cao	
	(b)	3	A1	cao	

16		Yes, with explanation	C1	Yes, with explanation **Possible explanations** they are both equivalent to $\frac{3}{4}$ $\frac{6}{8} = \frac{3}{4}$ and $\frac{15}{20} = \frac{3}{4}$ you can divide 6 and 8 by 2 and 15 and 20 by 5 and get the same fraction showing that both fractions are equivalent to $\frac{30}{40}$ oe	a diagrammatic representation is acceptable for this mark
17		2	B1	cao	
18		Explanation	C1	for explanation **Possible explanations** Aliyah has divided by 2 but she needed to find a number that when multiplied by itself equals 36 square rooting doesn't mean dividing by 2 $\sqrt{36} = 6$ **Do not accept** 6 x 6 = 36 square root means divide by 2 18 + 18 = 36	
19	(a) (i)	60°	B1	cao	
	(ii)	Correct reason given	C1	Corresponding angles are equal	
	(b) (i)	120°	A1	cao (ft from part a)	
	(c)	Correct reason given	C1	Angles on a straight line add up to 180	
20		36	M1 M1 A1	For method to find $\frac{1}{4}$ of £48 e.g. $48 \div 4 = 12$ for method to find how much more money Lana needs e.g. $48 - 12$ cao	
21		6 and 30	M1	for starting to list factors of 30 **or** multiples of 3 **or** even numbers	Must be at least 3 numbers listed

			A2 (A1	for both numbers correct for one correct answer)	
22	(a)	$4x + 2$	A1	cao	Accept $x + 2x + x + 2$
	(b)	$3, 5, 6$	M1 M1 A1	For forming an equation for the perimeter $4x + 2 = 14$ For finding value of $x = 3$ **or** correctly substituting into each side $2x = 2 \times 3$ **and** $x + 2 = 3 + 2$ cao	
	(c)	Yes, with explanation	C1	All sides are different lengths.	