



GCSE MATHEMATICS 8300/2F

Foundation Tier Paper 2 Calculator
First Third

Mark scheme
June 2025

Version: 1.0

Mark schemes are prepared by the Lead Assessment Writer and considered, together with the relevant questions, by a panel of subject teachers. This mark scheme includes any amendments made at the standardisation events which all associates participate in and is the scheme which was used by them in this examination. The standardisation process ensures that the mark scheme covers the students' responses to questions and that every associate understands and applies it in the same correct way. As preparation for standardisation each associate analyses a number of students' scripts. Alternative answers not already covered by the mark scheme are discussed and legislated for. If, after the standardisation process, associates encounter unusual answers which have not been raised they are required to refer these to the Lead Examiner.

It must be stressed that a mark scheme is a working document, in many cases further developed and expanded on the basis of students' reactions to a particular paper. Assumptions about future mark schemes on the basis of one year's document should be avoided; whilst the guiding principles of assessment remain constant, details will change, depending on the content of a particular examination paper.

No student should be disadvantaged on the basis of their gender identity and/or how they refer to the gender identity of others in their exam responses.

A consistent use of 'they/them' as a singular and pronouns beyond 'she/her' or 'he/him' will be credited in exam responses in line with existing mark scheme criteria.

Further copies of this mark scheme are available from aqa.org.uk

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Glossary for Mark Schemes

GCSE examinations are marked in such a way as to award positive achievement wherever possible. Thus, for GCSE Mathematics papers, marks are awarded under various categories.

If a student uses a method which is not explicitly covered by the mark scheme the same principles of marking should be applied. Credit should be given to any valid methods. Examiners should seek advice from their senior examiner if in any doubt.

M	Method marks are awarded for a correct method which could lead to a correct answer.
A	Accuracy marks are awarded when following on from a correct method. It is not necessary to always see the method. This can be implied.
B	Marks awarded independent of method.
ft	Follow through marks. Marks awarded for correct working following a mistake in an earlier step.
SC	Special case. Marks awarded for a common misinterpretation which has some mathematical worth.
M dep	A method mark dependent on a previous method mark being awarded.
B dep	A mark that can only be awarded if a previous independent mark has been awarded.
oe	Or equivalent. Accept answers that are equivalent. eg accept 0.5 as well as $\frac{1}{2}$
[a, b]	Accept values between a and b inclusive.
[a, b)	Accept values $a \leq \text{value} < b$
3.14...	Accept answers which begin 3.14 eg 3.14, 3.142, 3.1416
Use of brackets	It is not necessary to see the bracketed work to award the marks.

Examiners should consistently apply the following principles.

Diagrams

Diagrams that have working on them should be treated like normal responses. If a diagram has been written on but the correct response is within the answer space, the work within the answer space should be marked. Working on diagrams that contradicts work within the answer space is not to be considered as choice but as working, and is not, therefore, penalised.

Responses which appear to come from incorrect methods

Whenever there is doubt as to whether a student has used an incorrect method to obtain an answer, as a general principle, the benefit of doubt must be given to the student. In cases where there is no doubt that the answer has come from incorrect working then the student should be penalised.

Questions which ask students to show working

Instructions on marking will be given but usually marks are not awarded to students who show no working.

Questions which do not ask students to show working

As a general principle, a correct response is awarded full marks.

Misread or miscopy

Students often copy values from a question incorrectly. If the examiner thinks that the student has made a genuine misread, then only the accuracy marks (A or B marks), up to a maximum of 2 marks are penalised. The method marks can still be awarded.

Further work

Once the correct answer has been seen, further working may be ignored unless it goes on to contradict the correct answer.

Choice

When a choice of answers and/or methods is given, mark each attempt. If both methods are valid then M marks can be awarded but any incorrect answer or method would result in marks being lost.

Work not replaced

Erased or crossed out work that is still legible should be marked.

Work replaced

Erased or crossed out work that has been replaced is not awarded marks.

Premature approximation

Rounding off too early can lead to inaccuracy in the final answer. This should be penalised by 1 mark unless instructed otherwise.

Continental notation

Accept a comma used instead of a decimal point (for example, in measurements or currency), provided that it is clear to the examiner that the student intended it to be a decimal point.

Q	Answer	Mark	Comments
1(a)	11	B1	
	Additional Guidance		
	Condone $11 + 8 = 19$ on the answer line or in the working if the answer line is blank		B1
	$11 + 8 = 19$ in the working and 19 on the answer line		B0

Q	Answer	Mark	Comments
1(b)	8	B1	
	Additional Guidance		
	Condone $3 \times 8 = 24$ on the answer line or in the working if the answer line is blank		B1
	$3 \times 8 = 24$ in the working and 24 on the answer line		B0

Q	Answer	Mark	Comments
1(c)	13	B1	
	Additional Guidance		
	Condone $20 - 13 = 7$ on the answer line or in the working if the answer line is blank		B1
	$20 - 13 = 7$ in the working and 7 on the answer line		B0

Q	Answer	Mark	Comments
2(a)	47	B1	

Q	Answer	Mark	Comments
2(b)	78	B1	
	Additional Guidance		
	Ignore any additional words eg animals		

Q	Answer	Mark	Comments
3(a)	East	B1	
	Additional Guidance		
	Any unambiguous indication eg due East or Easterly or E		B1
	Ignore any reference to a distance		
	090		B1
	90		B0
	2 directions chosen on the answer line is choice		B0
	Right		B0

Q	Answer	Mark	Comments
3(b)	4×10 or 40 or 3×10 or 30 or $4 + 3$ or 7	M1	may be on the diagram
	70	A1	SC1 50
	Additional Guidance		
	M1 may be awarded for correct work with no answer or incorrect answer, even if this is seen amongst multiple attempts		
	SC1 for using the direct distance from A to C		
	Further work eg1 $3 \times 10 + 4 = 34$ eg2 70 found then $70 \div 2 = 35$		M1A0 M1A0

Q	Answer	Mark	Comments
4(a)	ab or ba	B1	
	Additional Guidance		
	Allow upper case A and/or B		
	Do not accept $a \times b$ or $b \times a$ or a^b or b^a		

Q	Answer	Mark	Comments
4(b)	$3c$	B1	
	Additional Guidance		
	Do not accept $c3$ or $3 \times c$ or $c \times 3$		

Q	Answer	Mark	Comments
4(c)	p^3	B1	
	Additional Guidance		
	Do not accept $p3$		

Q	Answer	Mark	Comments
4(d)	1	B1	
	Additional Guidance		
	Do not accept $\frac{1}{1}$		

Q	Answer	Mark	Comments
5	$400 + 250 + 380$ or 1030 or $400 \div 1000$ or 0.4 or $250 \div 1000$ or 0.25 or $380 \div 1000$ or 0.38 or 1000	M1	oe
	1030 and 1000 or 1.03 or 1030 and 30 (metres) more/extra or 1000 and 30 (metres) more/extra	A1	oe eg 1km 30m SC1 10.3
	Additional Guidance		
	Ignore trailing 0s in decimals eg 1.030		
	Ignore inequality signs		
	After 1000 and 1030 seen ignore irrelevant further incorrect conversion of units eg 1000 and $400 + 250 + 380 = 1030 = 1.3\text{km}$		M1A1
	Adds an extra distance, eg 1030 shown followed by $1030 + 380$		M1A0

Q	Answer	Mark	Comments
6	11 or 20 or 14	B1	may be on diagram implied by 5
	50 – 11 – 20 – 14 or 5	M1	oe allow one error in 11, 20 or 14 may be implied by the height of the bar
	All four of : • bar drawn to height 5 • same width as other bars • all gaps between bars equal • bar drawn with intended straight lines	A2	A1 two or three of the four bullets met mark intention ignore shading
	Additional Guidance		
	A bar that satisfies all four criteria with no working		B1M1A2
	A bar of height 3 that has no working and meets 3 of the bullet points		B0M0A0

Q	Answer	Mark	Comments
7	$\frac{4}{5}$	B2	B1 equivalent fraction eg $\frac{80}{100}$ or $\frac{0.8}{1}$ SC1 0.8 or 80%
	Additional Guidance		
	B1 may be awarded for correct work with no answer or incorrect answer, even if this is seen amongst multiple attempts		
	For B1 condone inclusion of a common unit eg1 $\frac{80p}{100p}$ eg2 $\frac{80}{100} p$ eg2 $\frac{80p}{£1}$		B1 B1 B0

Q	Answer	Mark	Comments
8(a)	210	B1	

Q	Answer	Mark	Comments
8(b)	1.4	B1	
	Additional Guidance		
	Condone trailing zeros eg 1.40		B1

Q	Answer	Mark	Comments
8(c)	$32 \div 8$ or 4 or 32×5 or 160 or $5 \div 8$ or 0.625 or $8 \div 5$ or 1.6	M1	oe eg $8 + 8 + 8 + 8 = 32$ or 8, 16, 24, 32
	20	A1	

Q	Answer	Mark	Comments
9(a)	2:30pm or 14:30	B1	
	Additional Guidance		
	Condone 14:30 pm or half past two in the afternoon		B1
	2:30 am or 2:30 or half past two		B0

Q	Answer	Mark	Comments
9(b)	Alternative method 1		
	$8 \div 4$ or 2	M1	oe may be seen by the table
	their 2×60 or 120	M1dep	oe may be seen by the table
	120 and Yes	A1	oe eg Yes and 80 minutes more
	Alternative method 2		
	8×60 or 480	M1	oe may be seen by the table
	$\frac{1}{4} \times$ their 480 or 120	M1dep	oe may be seen by the table
	120 and Yes	A1	oe eg Yes and 80 minutes more
	Alternative method 3		
	8×60 or 480	M1	oe may be seen by the table
	$\frac{200}{8 \times 60}$ or $\frac{200}{480}$	M1dep	oe fraction, decimal or percentage eg $0.41\dot{6}$
	$\frac{5}{12}$ and $\frac{3}{12}$ and Yes	A1	oe fractions with common denominator or decimals or percentages eg $0.41\dot{6}$ and 0.25
	Alternative method 4		
	8×60 or 480	M1	oe may be seen by the table
	200×4 or 800	M1	oe may be seen by the table
	480 and 800 and Yes	A1	oe
	Alternative method 5		
	$8 \div 4$ or 2	M1	oe may be seen by the table
	$200 \div 60$ or $3\frac{1}{3}$ or 3.(...)	M1	oe eg 3 hours 20 minutes may be seen by the table
	2 and 3.(...) and Yes or 2 and $3\frac{1}{3}$ and Yes	A1	oe eg Yes and 2 hrs and 3 hrs 20 mins eg Yes and 80 minutes more

The Additional Guidance for Question 9b is on the next page

9b cont	Additional Guidance	
	Lists: 1h = 60, 2h = 120, 3h = 180, 4h = 240 ... up to 8h = 480 would gain M1 from alts 2, 3, or 4 for converting 8h to 480 minutes 2h = 120 needs to be chosen from the list or at the end of the list to gain M2 from alt 1	
	Accept any unambiguous indication for ticking a box	
	Ignore any reference to Margot	
	Accept $0.41\dot{6}$ and $41.\dot{6}$ rounded or truncated to at least 2 sf	
	Alts 4 and 5 the second method mark is independent	