CAMBRIDGE
International Education

Cambridge IGCSE™

MATHEMATICS **0580/33**

Paper 3 (Core) **May/June 2026**

MARK SCHEME

Maximum Mark: 80

Published

This mark scheme contains the instructions and marking guidance that our examiners used to mark candidate responses for this component.

Before they start marking, examiners complete a standardisation process. They review a range of candidate responses and discuss the mark scheme in detail to agree which answers can and cannot be accepted. Examiners award marks where it is clear that candidate responses have met the requirements of the mark scheme. These requirements may vary between different components or different versions of the same component, depending on the exact requirements of the question and the candidate responses seen during the standardisation process.

Sometimes, our mark schemes may allow marks to be awarded to responses which contain elements that are factually incorrect or for content not covered by the syllabus. We do this in response to the demands of a specific question to support candidates and make sure that our assessments are fair. However, these allowances should not be used as a guide for teaching and learning.

We cannot discuss the mark scheme with schools, and we recommend that schools read the mark scheme together with the assessment material and the Principal Examiner Report for Teachers.

[Turn over

General marking principles

All examiners must apply these marking principles when marking candidate responses.

1	Examiners must award marks for each response in line with: • the specific **content** defined in the mark scheme • the specific **skills** defined in the mark scheme or in the level descriptions • the **standard of response** required as exemplified by the standardisation scripts.
2	Examiners must award **whole marks** (not half marks, or other fractions).
3	Examiners must award marks **positively**. This means that: • marks are not deducted for errors or omissions • marks are awarded for correct/valid answers as defined in the mark scheme and also for **other valid answers** which go beyond the scope of the syllabus and mark scheme referring to your team leader as appropriate • the quality of spelling, punctuation and grammar are judged **only** when the mark scheme indicates that these features are **specifically assessed** in the question. However, the meaning of all responses must be unambiguous.
4	Examiners must **consistently** apply the requirements of the mark scheme and any rules for what to do when candidates have not followed instructions correctly.
5	Examiners must use the **full range of marks** defined in the mark scheme, unless limited by the quality of the candidate responses seen.
6	Examiners must award marks according to the mark scheme and **must not** award marks with grade thresholds or grade descriptions in mind.

Mathematics-Specific Marking Principles

1 Unless a particular method has been specified in the question, full marks may be awarded for any correct method. However, if a calculation is required then no marks will be awarded for a scale drawing.

2 Unless specified in the question, non-integer answers may be given as fractions, decimals or in standard form. Ignore superfluous zeros, provided that the degree of accuracy is not affected.

3 Allow alternative conventions for notation if used consistently throughout the paper, e.g. commas being used as decimal points.

4 Unless otherwise indicated, marks once gained cannot subsequently be lost, e.g. wrong working following a correct form of answer is ignored (isw).

5 Where a candidate has misread a number or sign in the question and used that value consistently throughout, provided that number does not alter the difficulty or the method required, award all marks earned and deduct just 1 A or B mark for the misread.

6 Recovery within working is allowed, e.g. a notation error in the working where the following line of working makes the candidate's intent clear.

Annotations guidance for centres

Examiners use a system of annotations as a shorthand for communicating their marking decisions to one another. Examiners are trained during the standardisation process on how and when to use annotations. The purpose of annotations is to inform the standardisation and monitoring processes and guide the supervising examiners when they are checking the work of examiners within their team. The meaning of annotations and how they are used is specific to each component and is understood by all examiners who mark the component.

We publish annotations in our mark schemes to help centres understand the annotations they may see on copies of scripts. Note that there may not be a direct correlation between the number of annotations on a script and the mark awarded. Similarly, the use of an annotation may not be an indication of the quality of the response.

The annotations listed below were available to examiners marking this component in this series.

Annotations

Annotation	Meaning
^	More information required
A0	Accuracy mark awarded zero
A1	Accuracy mark awarded one
A2	Accuracy mark awarded two
A3	Accuracy mark awarded three
B0	Independent mark awarded zero
B1	Independent mark awarded one
B2	Independent mark awarded two
B3	Independent mark awarded three
BOD	Benefit of the doubt

Annotation	Meaning
C	Communication mark
	Incorrect
FT	Follow through
Highlighter	Highlight a key point in the working
ISW	Ignore subsequent work
M0	Method mark awarded zero
M1	Method mark awarded one
M2	Method mark awarded two
M3	Method mark awarded three
MR	Misread
O	Omission
Off-page comment	Allows comments to be entered at the bottom of the RM marking window and then displayed when the associated question item is navigated to.
On-page comment	Allows comments to be entered in speech bubbles on the candidate response.
Pre	Premature rounding/approximation
SC	Special case
SEEN	Indicates that work/page has been seen
TE	Transcription error

Annotation	Meaning
	Correct
	Correct answer from incorrect working

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MARK SCHEME NOTES

The following notes are intended to aid interpretation of mark schemes in general, but individual mark schemes may include marks awarded for specific reasons outside the scope of these notes.

Types of mark

M Method marks, awarded for a valid method applied to the problem.

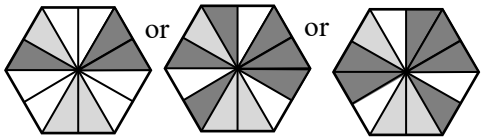
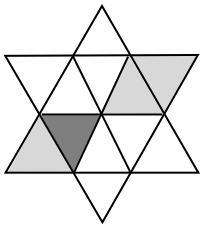
A Accuracy mark, awarded for a correct answer or intermediate step correctly obtained. For accuracy marks to be given, the associated Method mark must be earned or implied.

B Mark for a correct result or statement independent of Method marks.

When a part of a question has two or more 'method' steps, the M marks are in principle independent unless the scheme specifically says otherwise; and similarly where there are several B marks allocated. The notation 'dep' is used to indicate that a particular M or B mark is dependent on an earlier mark in the scheme.

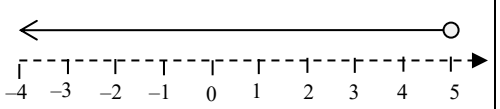
Abbreviations

awrt	answers which round to
cao	correct answer only
dep	dependent
FT	follow through after error
isw	ignore subsequent working
nfww	not from wrong working
oe	or equivalent
rot	rounded or truncated
SC	Special Case
soi	seen or implied

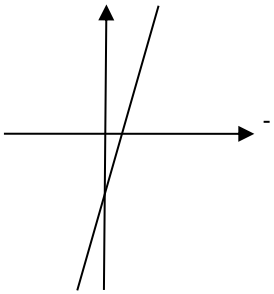
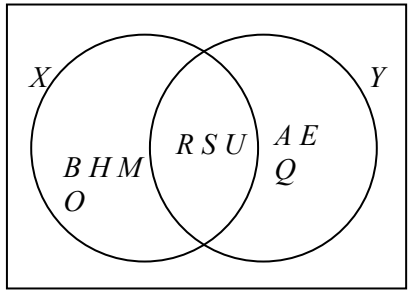
Question	Answer	Marks	Partial Marks	Guidance
1	16 25 cao	**1**		Allow e.g. 16.25, 16:25, 16 25 h. Do not allow 16 25 pm , 16hr 25min, 16°25°.
2	1, 2, 13, 26	**2**	**B1** for 3 correct and no extras or 4 correct and 1 extra	Allow 1 × 26, 2 × 13 for B1.
3(a)	D	**1**		
3(b)	14	**1**		
4	5.51 cao	**2**	**B1** for 5.505….. or $5\frac{50}{99}$ or $\frac{545}{99}$ or for their incorrect answer seen written to at least 3 dp and correctly rounded to 2 dp	Accept $5.\dot{5}\dot{0}$ for B1.
5(a)	Correct shading 	**1**		
5(b)	Correct triangle shaded 	**1**		Ignore extra lines drawn on diagram.

Question	Answer	Marks	Partial Marks	Guidance
6	58% 0.581 $\frac{32}{55}$ $\sqrt[3]{0.2}$ $\frac{\pi}{5}$	**2**	**B1** for 4 in correct order or **M1** for decimal equivalents to enable comparison (0.581), 0.584…to 0.585, 0.5818 to 0.582, 0.6[28…] to 0.63, 0.58	Accept correct decimal equivalents in correct order for 2 marks i.e. 0.58, 0.581, 0.5818 to 0.582, 0.584…to 0.585, 0.6[28..] to 0.63
7	70	**2**	**B1** for at least one each of 2.5, 5, and 15 labelled correctly on diagram or **M1** for 15 + 5 + 2.5 + 15 + 10 + 15 + 2.5 + 5 oe	E.g. The two 2.5's may be written as 5 in M1. M1 for any method that leads to 70 e.g. 2 × 20 + 2 × 15.
8(a)	20 –5	**2**	**B1** for each	
8(b)	$\frac{3n}{2}$ oe final answer	**1**		e.g. $\frac{3}{2}+(n-1)\frac{3}{2}$
8(c)	2 –4 8	**2**	**B1** for 2 correct	3rd and 4th terms can be FT from the 2nd term for B1.
9(a)	125	**1**		Allow 123 to 127.
9(b)	220	**2**	**B1** for 5.5 [cm] soi or **M1** for *their* 5.5 × 40 seen	For 2 marks allow 216 to 224 . For B1 allow 5.4 to 5.6 . For M1, 5 ⩽ *their* 5.5 ⩽ 6.

Question	Answer	Marks	Partial Marks	Guidance
9(c)	Town *D* correctly placed	**2**	**B1** for correct distance of 7.5 from *A* plotted or for correct distance of 6 cm from *B* plotted	Tolerance 7.3cm to 7.7cm and 5.8cm to 6.2cm. *D* does not need to be labelled.
10	5	**1**		
11(a)(i)	Bar drawn correct width with height 5 in correct position	**2**	**M1** for 40 – (6 + 12 + 10 + 7) oe	M1 implied by [Science =] 5, or by a bar drawn with height 5 with incorrect width/position. Allow good freehand, bar height closer to 5 (by eye) than to 4 or 6.
11(a)(ii)	30	**1**		
11(b)(i)	Point plotted at (6, 56)	**1**		Tolerance $\pm\frac{1}{2}$ small square.
11(b)(ii)	7	**1**		
11(b)(iii)	Correct ruled line of best fit	**1**		Line must pass through (1.2, 18) to (1.2. 30) **and** (6, 50) to (6, 58) **and** (10, 74) to (10, 88).
11(b)(iv)	Their reading at 7	**1**	Strict FT their line with a positive gradient	Tolerance $\pm\frac{1}{2}$ small square.
12	$2w + 8q$ or $2(w + 4q)$ final answer	**2**	**B1** for $2w$ or $8q$ in final answer or for correct answer seen and spoilt	
13(a)	5.4 oe	**2**	**M1** for first correct step $6a = 32.4$ or better	For 2 marks accept answer $\frac{27}{5}$ or $5\frac{2}{5}$. M1 for e.g. $[a =] \frac{32.4}{6}$.
13(b)	1.5 or $1\frac{1}{2}$ or $\frac{3}{2}$	**2**	**M1** for $-7 + 10 = 5y - 3y$ oe or better	

Question	Answer	Marks	Partial Marks	Guidance
14		**1**		Accept any length arrow or full-length line.
15(a)	2.9	**2**	**B1** for 2 hrs 54	Answer $2\frac{9}{10}$, $2\frac{54}{60}$, scores 2. Accept answer 3 for 2 marks only if 2.9 seen in working. For B1 condone e.g. 2 54, 2.54, 2,54 , 2:54.
15(b)	17.2 or 17.24…	**2**	**M1** for $\frac{50}{\textit{their}\text{ time}}$	*their* time is 2.9 or *their* **(a)** or 2 hours 54 mins or 2.54 or 174.
15(c)(i)	straight line from (8 30, 0) to (9 45, 50)	**1**		Line must be continuous. Allow $\pm\frac{1}{2}$ small square at (9 45, 50)
15(c)(ii)	7	**1**	FT *their* line	$\pm\frac{1}{2}$ small square
16	7590	**2**	**M1** for $\frac{34500\times4.4\ [\times5]}{100}$ oe	M1 implied by final answer 1518 or 42 090 (principal added) or by 7590 seen and then spoilt. For method do not accept 4.4% for $\frac{4.4}{100}$ unless recovered.
17	34200	**3**	or **M2** for $\frac{4680\times760}{104}$ oe or **M1** for $\frac{4680}{104}$ oe or for $\frac{4680}{pop\ B}=\frac{104}{760}$ oe	M1 implied by 45.

Question	Answer	Marks	Partial Marks	Guidance
18	15	**3**	**M2** for $\frac{435}{0.58} - 735$ oe or **M1** for $\frac{435}{0.58}$ oe or **M1** for $435 - 735 \times 0.58$ oe	Condone –15 for 3 marks. M2 for $735 - \frac{435}{0.58}$ Alt method: M2 for $\pm\frac{435 - 735 \times 0.58}{0.58}$ (working in euros, then converting to $). M1 implied by 750. M1 implied by 8.7.
19	150	**2**	**M1** for $180 - (360 \div 12)$ oe or better or $\frac{(12-2)180}{12}$ oe or better	M1 for e.g. 180 – 30 or 1800 ÷ 12.
20(a)	Complete tree diagram	**2**	**B1** for $\frac{5}{6}$ oe on the first branch or $\frac{1}{6}$ oe in both correct places in second branches	Accept equivalent decimals or percentages given to at least 3 sf i.e. 0.166 to 0.167, or 16.6 % to 16.7% or 0.833...or 83.3..%.
20(b)	$\frac{1}{36}$	**2**	**M1** for $\frac{1}{6} \times \textit{their}\ \frac{1}{6}$	Accept 0.0277 to 0.0278. isw attempts to convert to a decimal or percentage. $0 < \textit{their}\ \frac{1}{6} < 1$

Question	Answer	Marks	Partial Marks	Guidance
21(a)	Straight line with positive gradient and negative y-intercept 	1		Mark the line and ignore all labels/intercepts. Line must be continuous.
21(b)	–2.5 or $-2\frac{1}{2}$ or $-\frac{5}{2}$	2	**B1** for answer $\frac{5}{2}$ oe or **M1** for a correct rise/run	M1 for any numerical $\frac{y_1 - y_2}{x_1 - x_2}$ which would evaluate to –2.5 , e.g. $\frac{6-1}{2-4}$. M1 implied by answer [y =] $-\frac{5}{2}x + c$ oe c may be numeric or algebraic.
22(a)	$P \cup Q$	1		Accept in brackets.
22(b)(i)		2	**B1** for at least 6 letters in the correct place, none of which are repeated in different sections	Ignore repeats of the same letter in the same section.

Question	Answer	Marks	Partial Marks	Guidance
22(b)(ii)	$A\ E\ Q$	**1**	FT *their* X'	FT is dep on letter(s) in X' Accept $\{A, E, Q\}$
22(b)(iii)	3	**1**	FT *their* $X \cap Y$	FT dep on letter(s) in the region. Accept n = 3. Do not accept e.g. {3}.
23	8.75 or $8\frac{3}{4}$	**2**	**M1** for $\frac{8}{14}=\frac{5}{AB}$ oe or better	Accept $\frac{35}{4}$ for 2 marks.
24(a)	5.71×10^{-4}	**1**		
24(b)	4.54×10^{6}	**2**	**B1** for 4 540 000 oe	B1 oe e.g. 45.4×10^{5} , 454×10^{4}
25(a)	Angle in a semicircle = 90	**1**		Accept angle [in a] semicircle [= 90], angle subtended by a diameter [= 90]. Accept right-angle for 90. Do not accept: [Right angled] triangle [in a] semicircle [is/are 90].
25(b)	16.1 or 16.12…	**2**	**M1** for $14^2 + 8^2$ oe	Accept, for 2 marks, as final answer on the answer line $\sqrt{260}$ or $2\sqrt{65}$. For 2 marks accept answer 16 only if 16.1 or 16.12…seen. Accept alternative longer complete methods.

Question	Answer	Marks	Partial Marks	Guidance
25(c)	29.7 or 29.74…	**2**	**M1** for $\tan[\ldots=]\frac{8}{14}$ oe	For 2 marks accept answer 29 or 30 only if 29.7 or 29.74…seen. M1 for $\sin[\ldots=]\frac{8}{\sqrt{8^2+14^2}}$ or $\cos[\ldots=]\frac{14}{\sqrt{8^2+14^2}}$. Allow M1 for implicit form of sine rule/cosine rule or better. Accept alternative longer complete methods.
26	6.48	**4**	**M3** for $[r=]\frac{4\pi\times3.6^2}{8\pi}$ oe or **M2** for $\pi\times r\times8=4\times\pi\times3.6^2$ oe or **M1** for $4\times\pi\times3.6^2$ oe or $\pi\times r\times8$ oe	Mark at most accurate. For 4 marks accept answer 6, 6.4 or 6.5 only if exact answer 6.48 seen. Answers 6.47 to 6.494 imply M3. Surface area of sphere is implied by 163, or 162.77 to 162.93 or 51.84π. Curved surface area of cone is implied by 25.1*r* to 25.14...*r*.