CAMBRIDGE
International Education

Cambridge IGCSE™

MATHEMATICS **0580/11**

Paper 1 (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.

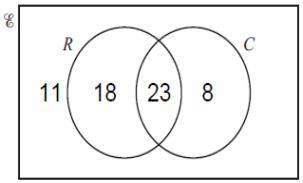
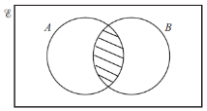
Abbreviations

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(a)	6 or 56 or 1000	**1**		Accept more than one answer if all correct, any errors score 0.
1(b)	7	**1**		
1(c)	25	**1**		
1(d)	7	**1**		
1(e)	$\sqrt{18}$	**1**		
2(a)	$b + 5$ oe final answer	**1**		Accept $5 + b$ Do **not** allow change of variable. Must be an expression i.e. answer must not contain an equals sign. Accept as a statement: Alan's age is $b + 5$.
2(b)	$65x$ oe final answer	**1**		Accept e.g. $x65$ or $x \times 65$ or $65 \times x$ Accept '$65x$ c' i.e. with cents as units.
3(a)	46	**1**		Accept 44 – 48
3(b)	acute	**1**		Allow poor spelling. Do **not** accept: actuse, obcute
4(a)	chord	**1**		Allow poor spelling.
4(b)	rhombus	**1**		Allow poor spelling. Do **not** accept rhomboid.
5(a)	[0].5	**1**		Allow trailing zeros.
5(b)	90	**1**		Accept 90%
5(c)	$\frac{3}{20}$ cao	**1**		

Question	Answer	Marks	Partial Marks	Guidance
6	Correct triangle with correct arcs	**2**	**B1** for correct triangle with incorrect or no arcs or for two correct arcs. If 0 scored, **SC1** for accurate triangle with arcs but lines interchanged	Tolerance ± 2mm for 2 or B1. Lines must start at A and C – within 1 mm by eye.
7(a)(i)	$\frac{1}{8}$ oe	**1**		isw incorrect cancelling or conversion to decimal or percentage. Equivalents include $\frac{2}{16}$, 0.125, 12.5%
7(a)(ii)	0	**1**		Accept e.g.: zero, nil, nought, 0**%** Accept all fractions equivalent to 0. Ignore correct embellishments e.g. impossible.
7(a)(iii)	1	**1**		Accept: $\frac{16}{16}$, 100% Accept all fractions equivalent to 1. Ignore correct embellishments e.g. certain.
7(b)	0.8	**1**		Accept $\frac{4}{5}$, $\frac{8}{10}$, 80%
8	38.3	**1**		Accept –38.3
9	08 30 or 8 30am	**2**	**M1** for 09 45 – 12 – 26 – 37 oe or **B1** for 75 or 1[h] 15[m]	Accept 08 30h[ours] for 2 marks. Award **M1** for 8 30, 08:30am. Award **B1** for e.g. 1:15, $1\frac{1}{4}$, [0]8h 30**min** (this is a time period).

Question	Answer	Marks	Partial Marks	Guidance
10	Alternate angles are equal Corresponding angles are equal	**2**	**B1** for each	Accept: Alternate [angles are equal]. Accept alternating. Do **not** allow alternative or alt. Do **not** allow Z-angles but accept as embellishment. Accept: Corresponding [angles are equal]. Do **not** allow correspond. Do **not** allow F-angles but accept as embellishment.
11	Fully correct net	**3**	**B2** for 3 correct extra faces in the correct places **B1** for 1 correct extra face in the correct place	Condone good freehand for 3, 2 or 1 mark(s). 3D drawing scores 0. For B2 or B1, maximum of 5 other faces drawn. Sides must join at vertices for 3, B2 or B1 for correctly joined faces. Side rectangles must be attached to correct central faces.
12(a)	31	**1**		
12(b)	241	**1**		
12(c)	247	**1**		
12(d)	$\frac{1}{8}$ cao	**2**	**B1** for $\frac{4}{32}$ or $\frac{2}{16}$ If 0 scored, award **SC1** for $\frac{their\ k}{32}$ simplified fully	SC1 is dependent on *their k* and 32 sharing a common factor other than 1.
13	$\frac{10\times4}{7+1}$	**M1**		Allow four correct roundings given.
	5 final answer	**A1**	If 0 scored **SC1** for 3 correct roundings or for all correct but with any trailing zeros	$\frac{5}{1}$ scores A0. If answer seen in working and then a different answer given on answer line, award M1 only.

Question	Answer	Marks	Partial Marks	Guidance
14	17	**4**	**B3** for [green =] 44 seen OR **B2** for [red =] 18 and [green =] 27 seen OR **M1** for $\frac{45}{2+3} \times k$ where $k = 1$, 2 or 3 seen **M1** for (*their* 18 + 4) × 2	M1 may be implied by $\frac{45}{2+3}$, 9, 18 or 27 i.e. can score M1M1
15(a)(i)		**2**	**B1** for 2 regions correct or **M1** 11 correct and one of these is true: total in sets is 49 **and** *R* adds to 41 or total in sets is 49 **and** *C* adds to 31 or *R* adds to 41 **and** *C* adds to 31	Ignore 41 and 31 written outside circles or on circumference or a calculation e.g. 41 – 23 with 18.
15(a)(ii)	$\frac{8}{60}$ oe	**1**	FT $\frac{\textit{their}\,8}{60}$ provided $0 < \textit{their}\ 8 < 31$	isw incorrect cancelling or conversion to decimal or percentage. oe e.g. $\frac{4}{30}$, $\frac{2}{15}$, 0.1333…, 13.33…%. Can only FT if one number written in correct region. Do **not** FT NR as 0.
15(b)		**1**		

Question	Answer	Marks	Partial Marks	Guidance
16	10 17	**3**	**B2** for 112 or 1h 52min or **M1** for 112*k* oe or for [16 =] 2 × 2 ×2 × 2 or [28 =] 2 × 2 × 7 or two correct factor trees/tables for both 16 and 28 OR **M2** for listing times/multiples for both 16 and 28 to at least 10 17 or 112[min] or **M1** for listing at least 3 of each or one full list to 10 17 or 112[min].	Accept 10:17am for 3 marks. **NB** 112 or 1h 52min chosen from a list i.e. **not** just written within a list. e.g. 224, 336, 448 (from 28 × 16), 560… or 3h 44m, 5h 36m, 7h 28m, 9h 20m… or 12 09, 14 01, 15 53, 17 45, 19 37 Allow inclusion of '1' in tables, trees or product of primes. Could be a combined table.
17	$\frac{17}{30}$ cao final answer	**3**	**B1** for $\frac{13}{6}$ and $\frac{8}{5}$ or $1+\frac{1}{6}-\frac{3}{5}$ **M1** for $\frac{13\times5}{6\times5}$ and $\frac{8\times6}{5\times6}$ or better or [2] $\frac{5[\times1]}{6\times5}$ and [1] $\frac{3\times6}{5\times6}$ or for $\frac{their\,13\times5}{6\times5}$ and $\frac{their\,8\times6}{5\times6}$	Correct step for dealing with mixed numbers. Allow $\frac{13k}{6k}$ **and** $\frac{8k}{5k}$ Correct step to deal with mixed numbers can come at a later stage. Correct method to find and use common denominator i.e. $\frac{65}{30}$ **and** $\frac{48}{30}$. Using *their* improper fractions, i.e. *their*13 is over 6 and *their*8 is over 5.
18(a)	3 3 17	**2**	**B1** for 1 correct	

Question	Answer	Marks	Partial Marks	Guidance
18(b)	Correct curve	**4**	**B3FT** for 8 or 9 points correctly plotted **B2FT** for 6 or 7 points correctly plotted **B1FT** for 4 or 5 points correctly plotted	For 4 marks curve takes precedence over points Correct smooth curve must dip below $y = -3$ between $x = -1$ and $x = -2$. Do **not** allow clearly ruled line segments or a straight line between $x = -1$ and $x = -2$. Tolerance $\pm\frac{1}{2}$ small square for points and curve radially. B marks: if a plot is missing then mark curve. Ignore answer for later parts.
18(c)	$x = -\frac{1}{2}$ oe	**1**		
18(d)	–2.4 to –2.2 and 1.2 to 1.4	**2**	**B1** for each FT *their* graph	Range is inclusive, FT ± 0.1 i.e. half small square, 3 answers – maximum mark is B1. 4 answers scores 0.
19(a)	Correct triangle at (4, –5), (5, –5), (4, –2)	**2**	**B1** for translation by $\begin{pmatrix} k \\ -6 \end{pmatrix}$ or $\begin{pmatrix} 3 \\ k \end{pmatrix}$	
19(b)	Correct triangle at (1, –3), (2, –3), (1, –6)	**2**	**B1** for reflection in $y = k$ or in $x = -1$	
19(c)	Enlargement [centre] (5, 4) [sf] 2	**3**	**B1** for each	More than one transformation scores 0, treat extra properties as choice. Accept 5, 4 for centre. Accept the 'position vector $\begin{pmatrix} 5 \\ 4 \end{pmatrix}$' for centre (5, 4). Accept scale factor: ×2, by 2, multiplied by 2. Do **not** accept: 'double /twice its size' alone as the scale factor.

Question	Answer	Marks	Partial Marks	Guidance
19(d)	Rotation [centre] (0, 0) 90° clockwise	**3**	**B1** for each	More than one transformation scores 0, treat extra properties as choice. Do **not** accept rotational symmetry for rotation. Accept: *O*, origin, 0,0. Accept the 'position vector $\begin{pmatrix}0\\0\end{pmatrix}$' for centre (0, 0). Accept: –90, 270, 270 anticlockwise Do **not** accept: 90, 'Right 90'
20	[y =] $-0.3x + 4$ oe	**3**	**B2** for $-0.3x + c$ oe gradient or **M1** for a correct $\frac{rise}{run}$ e.g. $\frac{1.5}{-5}$ or –0.3 oe **B1** for $mx + 4$, $m \neq 0$	Accept $-\frac{3}{10}$ as gradient. c need not be substituted by a number; c could be 0 or missing. Any numerical $(y_2 - y_1) \div (x_2 - x_1)$ which = –0.3 or a right-angled triangle marked on graph with e.g. run = 10 and rise = –3. Accept minus sign in denominator of fraction. Answer of –0.3 + 4 award **M1** implied for correct gradient, but B0. m need not be substituted by a number but must **not** be 0 or missing.
21(a)	[T =] $\frac{P}{y}$ final answer	**1**		Accept: $p \div y$, p / y
21(b)	$x^2 + 3x - 40$	**2**	**B1** for $x^2 + 8x - 5x - 40$ with three out of four terms correct	Signs must be resolved for 2 marks, $+3x$ counts as two terms. Accept as a list or in a diagram.
22	12.65 12.75	**2**	**B1** for each If 0 scored, **SC1** for both correct but reversed	

Question	Answer	Marks	Partial Marks	Guidance
23	[x =] 3 [y =] –2 nfww	**4**	**M1** for correctly equating one set of coefficients **M1** for correct method to eliminate one variable OR **M1** for making x or y the subject of one equation **M1** for substitution of x or y from *their* rearranged equation **A1** for $x = 3$ **A1** for $y = –2$ If at least one M mark awarded followed by A0, A0, then also give **SC1** for 2 values satisfying one of the original equations	**M2** for $17kx = 51k$ or $17ky = –34k$ allow one arithmetic error in either M1, but not both. A sign error is not an arithmetic error. If 2 arithmetic errors in first M mark, then **M0M0** Allow TE for fully correct, clearly stated values of x and y in the working, but in reversed positions on the answer line. or when two equations, in one variable, are equated **SC1** for 2 values that substitute to give $3x + 4y$ rounding to 1.00 e.g. (–1, 1) or (–45, 34) $2x – 3y$ rounding to 12.0 e.g. (–3, 6)