GradeMax

CAMBRIDGE
International Education

Cambridge IGCSE™

CAMBRIDGE INTERNATIONAL MATHEMATICS **0607/52**

Paper 5 (Core) **May/June 2026**

MARK SCHEME

Maximum Mark: 40

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.

This document consists of **16** printed pages.

© Cambridge University Press & Assessment 2026

[Turn over

GradeMax

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.

© Cambridge University Press & Assessment 2026

0607/52 Mark Scheme June 2026

GradeMax

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.

© Cambridge University Press & Assessment 2026

GradeMax

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
	Accuracy mark awarded zero
	Accuracy mark awarded one
	Accuracy mark awarded two
	Accuracy mark awarded three
	Independent mark awarded zero
	Independent mark awarded one
	Independent mark awarded two
	Independent mark awarded three
	Benefit of the doubt

© Cambridge University Press & Assessment 2026

0607/52 Mark Scheme June 2026

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

© Cambridge University Press & Assessment 2026

GradeMax

Annotation	Meaning
	Correct
	Correct answer from incorrect working

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

© Cambridge University Press & Assessment 2026

0607/52 Mark Scheme June 2026

Question	Answer	Marks	Partial Marks	Guidance
1(a)	move | sticks taken | sticks left | result – | – | 3 | – 1 | F 2 | **1** | – 2 | Y **1** | 0 | **w**	**1**		1, 1
1(b)	move | sticks taken | sticks left | result – | – | 6 | – 1 | F 1 | **5** | – 2 | Y **2** | 3 | – 3 | F 1 | **2** | – 4 | Y **2** | 0 | w move | sticks taken | sticks left | result – | – | 6 | – 1 | F 2 | **4** | – 2 | Y **1** | 3 | – 3 | F 2 | **1** | – 4 | Y **1** | 0 | w	**2**	**B1** for each table	5, 2, 2, 2 4, 1, 1, 1

Question	Answer	Marks	Partial Marks	Guidance
1(c)	<table><tr><th>move</th><th>sticks taken</th><th>sticks left</th><th>result</th></tr><tr><td></td><td></td><td>9</td><td></td></tr><tr><td>1</td><td>F 1</td><td>8</td><td></td></tr><tr><td>2</td><td>Y 2</td><td>6</td><td></td></tr><tr><td>3</td><td>F 2</td><td>4</td><td></td></tr><tr><td>4</td><td>Y 1</td><td>3</td><td></td></tr><tr><td>5</td><td>F 2</td><td>1</td><td></td></tr><tr><td>6</td><td>Y 1</td><td>0</td><td>w</td></tr></table>	**2**	**B1** for moves 1, 2 and 3 **B1** for moves 4, 5 and 6	8, 2, 4 1, 3, 1, 1
1(d)(i)	Multiples oe	**1**		Accept ‘times tables’, multiply It’s divisible [by 3] e.g. divided of 3 Do not accept ‘a sequence in 3s’ Do not accept factors
1(d)(ii)	12, 15	**1**		Extra numbers must be correct
1(d)(iii)	Multiple of 3 oe	**1**		Accept ‘It’s’ Accept ‘in the 3 times table’ It’s divisible by 3. 3 is a factor of 18 e.g. 3 × 6 = 18 Ignore extra statements unless contradictory
1(d)(iv)	2	**1**		

© Cambridge University Press & Assessment 2026

Question	Answer	Marks	Partial Marks	Guidance
1(e)	move / sticks taken / sticks left / result 18 1 F 1 17 2 Y **2** **15** 3 F 2 13 4 Y **1** **12** 5 F 2 10 6 Y **1** 9 7 F 1 8 8 Y **2** **6** 9 F 2 4 10 Y **1** **3** 11 F 1 2 12 Y **2** 0 w	**3**	**B1** for 15, 12, 6 and 3 **B1** for moves 2, 4 and 6 which lead to the 9 **B1** for moves 8, 10 and 12 which lead to you winning	2, 1, 1 2, 1, 2

© Cambridge University Press & Assessment 2026

GradeMax

Question	Answer	Marks	Partial Marks	Guidance
2(a)	16	**1**		
	Two differences of 2 seen or sequence [2, 4, 6,] 8, 10, 12, 14, 16 or sequence 'below table' [18 12] 21 14 24 16 or multiplying number of sticks by $\frac{2}{3}$ or dividing by 1.5 or 24 – (24 ÷ 3) or 4 × 6 and 4 × 4	**C1**		BOD [18] 21 24 [12] 14 16 e.g. $24\times\frac{2}{3}$ or $\frac{24}{3}\times 2$ or 24 ÷ 1.5 Do not accept 24 = 3 × 8, 24 – 8 = 16
2(b)	60	**1**		
	$\frac{40}{2}\times 3$ oe or [24] 27 30 33 36 39 42 45 48 51 54 57 60	**C1**		May be in stages e.g. $40+\frac{40}{2}$ or 40 × 1.5 or 40 ÷ 2 = 20 and 20 × 3 = 60 Accept e.g. 20 × 2 = 40 [moves] and 30 × 2 = 60 [sticks]
3(a)	Whatever my friend takes I can take the rest oe	**1**		e.g. my friend takes 1 so I take 3 my friend takes 2 so I take 2 my friend takes 3 so I take 1

© Cambridge University Press & Assessment 2026

<table>
<tr><th>Question</th><th>Answer</th><th>Marks</th><th>Partial Marks</th><th>Guidance</th></tr>
<tr><td>3(b)</td><td>4</td><td>1</td><td></td><td></td></tr>
<tr><td></td><td>Fully correct and completed table with 4 rows only</td><td>C2</td><td>C1 for at least 2 rows correct out of 4 rows in a C2 table
or C1 for inefficient method leading to you win with 0
i.e. 4 rows without ‘you’ leaving 4
or 6 rows, e.g.
<table><tr><td>F1</td><td>7</td><td>F1</td><td>7</td></tr><tr><td>Y1</td><td>6</td><td>Y1</td><td>6</td></tr><tr><td>F1</td><td>5</td><td>F1</td><td>5</td></tr><tr><td>Y1</td><td>4</td><td>Y1</td><td>4</td></tr><tr><td>F1</td><td>3</td><td>F2</td><td>2</td></tr><tr><td>Y3</td><td>0</td><td>Y2</td><td>0</td></tr></table></td><td>Ignore moves column and top row (8)
Condone 0s in last 2 rows and omitting 0 in 4th row
For C2 ‘you’ must reduce to 4 sticks left
<table><tr><th>take</th><th>left</th><th>take</th><th>left</th><th>take</th><th>left</th></tr><tr><td>F1</td><td>7</td><td>F1</td><td>7</td><td>F1</td><td>7</td></tr><tr><td>Y3</td><td>4</td><td>Y3</td><td>4</td><td>Y3</td><td>4</td></tr><tr><td>F1</td><td>3</td><td>F2</td><td>2</td><td>F3</td><td>1</td></tr><tr><td>Y3</td><td>0</td><td>Y2</td><td>0</td><td>Y1</td><td>0</td></tr><tr><td>F2</td><td>6</td><td>F2</td><td>6</td><td>F2</td><td>6</td></tr><tr><td>Y2</td><td>4</td><td>Y2</td><td>4</td><td>Y2</td><td>4</td></tr><tr><td>F1</td><td>3</td><td>F2</td><td>2</td><td>F3</td><td>1</td></tr><tr><td>Y3</td><td>0</td><td>Y2</td><td>0</td><td>Y1</td><td>0</td></tr><tr><td>F3</td><td>5</td><td>F3</td><td>5</td><td>F3</td><td>5</td></tr><tr><td>Y1</td><td>4</td><td>Y1</td><td>4</td><td>Y1</td><td>4</td></tr><tr><td>F1</td><td>3</td><td>F2</td><td>2</td><td>F3</td><td>1</td></tr><tr><td>Y3</td><td>0</td><td>Y2</td><td>0</td><td>Y1</td><td>0</td></tr></table></td></tr>
</table>

© Cambridge University Press & Assessment 2026

<table>
<tr><th>Question</th><th>Answer</th><th>Marks</th><th>Partial Marks</th><th>Guidance</th></tr>
<tr><td>3(b)</td><td></td><td></td><td>
<table>
<tr><td>F1</td><td>7</td></tr>
<tr><td>Y1</td><td>6</td></tr>
<tr><td>F1</td><td>5</td></tr>
<tr><td>Y1</td><td>4</td></tr>
<tr><td>F3</td><td>1</td></tr>
<tr><td>Y1</td><td>0</td></tr>
</table>
</td><td>e.g. for C1, 4 rows without ‘you’ leaving 4
<table>
<tr><th>take</th><th>left</th><th></th><th>take</th><th>left</th><th></th><th>take</th><th>left</th></tr>
<tr><td>F1</td><td>7</td><td></td><td>F1</td><td>7</td><td></td><td>F1</td><td>7</td></tr>
<tr><td>Y1</td><td>6</td><td></td><td>Y2</td><td>5</td><td></td><td>Y2</td><td>5</td></tr>
<tr><td>F3</td><td>3</td><td></td><td>F3</td><td>2</td><td></td><td>F2</td><td>3</td></tr>
<tr><td>Y3</td><td>0</td><td></td><td>Y2</td><td>0</td><td></td><td>Y3</td><td>0</td></tr>
<tr><td colspan="8"></td></tr>
<tr><td>F2</td><td>6</td><td></td><td>F2</td><td>6</td><td></td><td></td><td></td></tr>
<tr><td>Y1</td><td>5</td><td></td><td>Y1</td><td>5</td><td></td><td></td><td></td></tr>
<tr><td>F3</td><td>2</td><td></td><td>F2</td><td>3</td><td></td><td></td><td></td></tr>
<tr><td>Y2</td><td>0</td><td></td><td>Y3</td><td>0</td><td></td><td></td><td></td></tr>
</table>
Not correct if friend could have won</td></tr>
<tr><td>3(c)</td><td>Any two multiples of 4 greater than 12</td><td>1</td><td></td><td>e.g. 16, 20</td></tr>
</table>

© Cambridge University Press & Assessment 2026

<table>
<tr><th>Question</th><th>Answer</th><th>Marks</th><th>Partial Marks</th><th>Guidance</th></tr>
<tr>
<td>4(a)</td>
<td>
<table>
<tr><th>Sticks taken</th><th>Number of sticks</th><th>nth term</th></tr>
<tr><td>1 or 2</td><td>3 6 9 12</td><td>3n oe</td></tr>
<tr><td>1, 2 or 3</td><td>4 8 12 16</td><td>4n oe</td></tr>
<tr><td>1, 2, 3 or 4</td><td>5 10 15 20</td><td>5n oe</td></tr>
<tr><td>1, 2, 3, 4 or 5</td><td>6 12 18 24</td><td>6n oe</td></tr>
<tr><td></td><td></td><td></td></tr>
<tr><td>1, 2, 3, … or k</td><td></td><td>(k + 1)n oe</td></tr>
</table>
</td>
<td>5</td>
<td>B1 for sequences in first 3 rows

B1 for last sequence

B2 for first 4 nth terms or B1 for one of first 4 nth terms

B1 for last nth term</td>
<td>12, 16, 10, 15, 20

6, 12, 18, 24

e.g. 3 +(n – 1)3
Condone x for n

e.g. kn + n not for k + 1 × n</td>
</tr>
</table>

© Cambridge University Press & Assessment 2026

Question	Answer	Marks	Partial Marks	Guidance
4(b)	[k=] [no. of sticks] 1, 2, 4, 5, 9, 14, 29 (no extras)	**2**	**B1** for four correct ignoring extras If 0 scored **SC1** for $1 \leqslant k \leqslant 29$	For 2 marks condone one number missing Mark a list of numbers, ignore any range
	[factors of 30] 1, 2, 3, 5, 6, 10, 15, 30 soi (with no extras) or writing 4 correct equations that would give integer solutions e.g. $2n = 30$ or $5(k + 1) = 30$ or $n = \frac{30}{k+1}$ and two examples such as $\frac{30}{4+1} = 6$	**C2**	**C1** for four correct factors soi with at most four extras or for solving one correct equation and giving the integer solution or $n = \frac{30}{k+1}$ or an example such as $\frac{30}{4+1} = 6$	Condone 'multiples' for 'factors' Factors may be seen in parts of diagrams like trees, tables or in divisions $\frac{30}{3} = 10$ counts as factors 3 and 10 Maybe seen as first numbers in sequences Ignore any other equations Do not count $k + 1 = 30$ as an equation

© Cambridge University Press & Assessment 2026

<table>
<tr><th>Question</th><th>Answer</th><th>Marks</th><th>Partial Marks</th><th>Guidance</th></tr>
<tr><td>5(a)</td><td>
<table>
<tr><td>move</td><td>sticks taken</td><td>sticks left</td><td>result</td></tr>
<tr><td></td><td></td><td>5</td><td></td></tr>
<tr><td>1</td><td>Y 2</td><td>3</td><td></td></tr>
<tr><td></td><td>F 2</td><td>1</td><td></td></tr>
<tr><td>3</td><td>Y 1</td><td>0</td><td>w</td></tr>
</table>
or
<table>
<tr><td>move</td><td>sticks taken</td><td>sticks left</td><td>result</td></tr>
<tr><td></td><td></td><td>5</td><td></td></tr>
<tr><td>1</td><td>Y 1</td><td>4</td><td></td></tr>
<tr><td>2</td><td>F 2</td><td>2</td><td></td></tr>
<tr><td>3</td><td>Y 2</td><td>0</td><td>w</td></tr>
</table>
</td><td>1</td><td></td><td></td></tr>
<tr><td>5(b)</td><td>1</td><td>1</td><td></td><td></td></tr>
<tr><td>5(c)</td><td>Leaves a multiple of 3 oe
or numerical example</td><td>1</td><td></td><td>18 is a multiple of 3 or It’s divisible by 3.
18 is a multiple of 6
Ignore extra statements unless contradict
e.g. 3 × 6 = 18, [19 – 18 = 1]
Because then it becomes 18 sticks and you can pick up every 3rd consecutive stick or
After my turn there are 18,15,12,9,6,3,0 left</td></tr>
<tr><td>5(d)</td><td>13, 14</td><td>1</td><td></td><td></td></tr>
</table>

© Cambridge University Press & Assessment 2026

GradeMax

Question	Answer	Marks	Partial Marks	Guidance
6(a)	[1] 5, 9, 13, 17, 21, 25 [29]	**1**		
	[+] 4 seen as difference or 4 8 12 16 20 24 28 [32] seen	**C1**		
6(b)	$4n - 3$ oe	**2**	**B1** for $kn - 3$, $k \neq 0$ or $4n + j$ or **B1** for $n = 4n - 3$	Accept e.g. $Tn = 4n - 3$ or $u = 4n - 3$
7	$5n - 2$ oe	**2**	**B1** for $kn - 2$, $k \neq 0$ or $5n + j$ or **B1** for $n = 5n - 2$	Accept e.g. $Tn = 5n - 2$ or $u = 5n - 2$

© Cambridge University Press & Assessment 2026

0607/52 Mark Scheme June 2026