



Cambridge IGCSE™

CAMBRIDGE INTERNATIONAL MATHEMATICS

0607/62

Paper 6 (Extended)

May/June 2026

MARK SCHEME

Maximum Mark: 50

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 **20** printed pages.

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
	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

Annotation	Meaning
C	Communication mark
X	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

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)	Move		Number of sticks left in the pile	2	B1 for each table	
	1	Friend takes 1	5			
	2	You take 2	3			
	3	Friend takes 1	2			
	4	You take 2	0			
	Move		Number of sticks left in the pile			
	1	Friend takes 2	4			
	2	You take 1	3			
	3	Friend takes 2	1			
	4	You take 1	0			

Question	Answer	Marks	Partial Marks	Guidance
1(b)(i)	9 is a multiple of 3 or After two moves there will be 6 sticks left	1		Examples: [It's]divisible by 3. [It's a] multiple of 3 3 is a factor [of 9] You always get $3n$ left Friend takes 2, I take 1 leaving 6 Ignore extra statements provided not contradictory. Not for 'sequence in threes'
1(b)(ii)	2	1		

Question	Answer			Marks	Partial Marks	Guidance
1(c)			18	2	B1 for the 3, 6 and 15 or B1 for at most 4 incorrect cells	
	1	Friend takes 1	17			
	2	You take 2	15			
	3	Friend takes 2	13			
	4	You take 1	12			
	5	Friend takes 2	10			
	6	You take 1	9			
	7	Friend takes 1	8			
	8	You take 2	6			
	9	Friend takes 2	4			
	10	You take 1	3			
	11	Friend takes 1	2			
	12	You take 2	0			

Question	Answer				Marks	Partial Marks	Guidance
2(a)	1 or 2	3	6	9	12	$3n$ oe	B1 for correct sequences B1 for first four nth terms B1 for general nth term Condone x for n Not for $k + 1 \times n$ Not for expanding to an incorrect answer
	1, 2 or 3	4	8	12	16	$4n$ oe	
	1, 2, 3 or 4	5	10	15	20	$5n$ oe	
	1, 2, 3, 4, or 5	6	12	18	24	$6n$ oe	
	1, 2, 3, ... or k					$(k+1)n$ oe	

Question	Answer	Marks	Partial Marks	Guidance
2(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 " $1 \leq k \leq 29$ "	Condone one number missing for B2 . Mark a list of numbers, ignore any range
	[Factors of 30 are] 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 $\frac{30}{4+1} = 6$ OR $k = \frac{30}{n} - 1$ and two examples such as $\frac{30}{10} - 1 = 2$	C2	C1 for 4 correct factors soi with at most 4 extras OR C1 for solving a correct equation and giving the integer solution OR C1 for $n = \frac{30}{k+1}$ or two examples such as $\frac{30}{4+1} = 6$ OR C1 for $k = \frac{30}{n} - 1$ or two examples such as $\frac{30}{10} - 1 = 2$	Condone 'multiples' for 'factors' Factors may be seen in parts of diagrams like trees, tables, as first numbers in sequences or in divisions $\frac{30}{3} = 10$ counts as factors 3 and 10. See exemplars. Ignore any other equations Do not count $k + 1 = 30$ as an equation $2n = 30$ and $2(k + 1) = 30$ count as the same equation

Question	Answer	Marks	Partial Marks	Guidance										
3	Leaves a multiple of 3 oe	1		18 is a multiple of 3 18 is a multiple of 6 Accept $6 \times 3 = 18$ oe Accept: your turn resulting in 18, 15, 12, 9, 6, 3, 0 oe										
4(a)	$4n - 3$ oe	2	B1 for $kn - 3$, $k \neq 0$, or $4n + j$	Accept e.g. $Tn = 4n - 3$ or $u = 4n - 3$ but $n = 4n - 3$ scores B1										
4(b)	<table border="1"> <tr> <td>1</td><td>5</td><td>9</td><td>13</td><td>17</td></tr> <tr> <td>1</td><td>3</td><td>5</td><td>7</td><td>9</td></tr> </table>	1	5	9	13	17	1	3	5	7	9	2	B1 for 5, 7 or 9	
1	5	9	13	17										
1	3	5	7	9										
	Start on 9 or 13 or 17 8, 4, 0 or 12, 8, 4, 0 or 16, 12, 8, 4, 0 seen in consecutive 'you take' rows	C1		May be seen over two columns e.g. 8 4 and 4 0 (in any order) Condone e.g. 'win' for 0 Ignore numbers in 1st two columns										
4(c)	$m = \frac{p+1}{2}$ oe as final answer	2	B1 for $\frac{p+1}{2}$ oe or $2m = p + 1$ oe seen or $m = 2n - 1$ or $m = 2x - 1$ oe seen or three differences of 4 for p and 2 for m	Condone $\frac{1}{2}p + \frac{1}{2}$ for $\frac{1}{2}p + \frac{1}{2}$ e.g. $p = 2m - 1$ Not for $m = 2p - 1$										

Question	Answer			Marks	Partial Marks	Guidance																
5	<table><tr><th>value of k</th><th>number of sticks</th><th>total number of moves</th></tr><tr><td>2</td><td>2</td><td>33</td></tr><tr><td>3</td><td>2</td><td>25</td></tr><tr><td>4</td><td>X</td><td></td></tr><tr><td>5</td><td>2</td><td>17</td></tr><tr><td>6</td><td>1</td><td>15</td></tr></table>	value of k	number of sticks	total number of moves	2	2	33	3	2	25	4	X		5	2	17	6	1	15	3	B2 for one row correct (except $k = 4$) or middle column correct or B1 for one correct number in 2nd or 3rd column	Ignore total number of moves in row 4.
	value of k	number of sticks	total number of moves																			
2	2	33																				
3	2	25																				
4	X																					
5	2	17																				
6	1	15																				
One row from <table><tr><td>For $k = 2$</td><td>48 is a multiple of 3 oe</td></tr><tr><td>For $k = 3$</td><td>48 is a multiple of 4 oe</td></tr><tr><td>For $k = 4$</td><td>45 or 50 is a multiple of 5 oe</td></tr><tr><td>For $k = 5$</td><td>48 is a multiple of 6 oe</td></tr><tr><td>For $k = 6$</td><td>49 is a multiple of 7 oe</td></tr></table> or With k given, [number of moves =] $\frac{\text{correct number in pile after first move}}{k + 1} [+1]$	For $k = 2$	48 is a multiple of 3 oe	For $k = 3$	48 is a multiple of 4 oe	For $k = 4$	45 or 50 is a multiple of 5 oe	For $k = 5$	48 is a multiple of 6 oe	For $k = 6$	49 is a multiple of 7 oe	C1	Accept e.g. for $k = 2$, 48 = 16×3 oe or 48, 45, 42, ..., 6, 3, 0, maybe for alternate terms The link with k must be clear Accept e.g. for $k = 2$, $2 \times \frac{48}{3}$, allowing e.g. 16 for $\frac{48}{3}$										
For $k = 2$	48 is a multiple of 3 oe																					
For $k = 3$	48 is a multiple of 4 oe																					
For $k = 4$	45 or 50 is a multiple of 5 oe																					
For $k = 5$	48 is a multiple of 6 oe																					
For $k = 6$	49 is a multiple of 7 oe																					

Throughout the modelling allow

4% as $\frac{4}{100}$ and 1.04 as $1 + \frac{4}{100}$ or $\frac{104}{100}$,

condone missing or wrong dollar signs, and

condone the final bracket missing in compound expressions e.g. $1.04(1.04^5 - 1$

Question	Answer	Marks	Partial Marks	Guidance							
6(a)	$500 \times \left(1 + \frac{4}{100}\right)^5$ or 500×1.04^5	C1									
	\$608.33	1		Allow \$608.32, 608.3 or 608							
6(b)	$500 \left(1 + \frac{4}{100}\right)^n > 1000$ or $\left(1 + \frac{4}{100}\right)^n > 2$ and $n \log \left(1 + \frac{4}{100}\right) > \log 2$ or $\frac{\log 2}{\log 1.04}$ OR sketch of $500 \left(1 + \frac{4}{100}\right)^n$ or $\left(1 + \frac{4}{100}\right)^n$ and intersecting horizontal line OR <table border="1"><tr><td>17</td><td>973.95</td><td rowspan="2">or</td><td>1.9479</td></tr><tr><td>18</td><td>1012.91</td><td>2.0258</td></tr></table>	17	973.95	or	1.9479	18	1012.91	2.0258	C2	C1 for $500 \left(1 + \frac{4}{100}\right)^n > 1000$ or $\left(1 + \frac{4}{100}\right)^n > 2$ or $n \log \left(1 + \frac{4}{100}\right) > \log 2$ or $\frac{\log 2}{\log 1.04}$ OR correct sketch of $500 \left(1 + \frac{4}{100}\right)^n$ or $\left(1 + \frac{4}{100}\right)^n$ OR 2 substitutions, but not 17 and 18 with correct answer.	Accept = or $\geq$ for > Allow variables other than n . Allow e.g. $\frac{1000}{500}$ for 2 Allow $\log_{1.04} 2$ for $\frac{\log 2}{\log 1.04}$ Not for decreasing gradient Allow 973 to 974 and 1012 to 1013 Allow 1.94 to 1.95 and 2.02 to 2.03
	17	973.95	or		1.9479						
	18	1012.91		2.0258							
18		1									

Question	Answer	Marks	Partial Marks	Guidance
7	$300 \times 1.04^2 + 300 \times 1.04$ oe OR $300 \times 1.04^2 = 324.48$ $300 \times 1.04 = 312$ OR $300 \times 1.04 = 312$ and 612×1.04	C2	C1 for 300×1.04 or 300×1.04^2 or $300 \times 1.04 + 300 = 612$ or 612×1.04	Accept 1.04×1.04 for 1.04^2 Condone 324.5 or 324 Allow $(300 + 312)$ for 612
	\$636.48			Accept 636.5 or 636
8(a)	$P \times 1.04^5$ $P \times 1.04^6$ [+] $P \times 1.04^5$	2	B1 for each correct line	Allow reversed order in second row

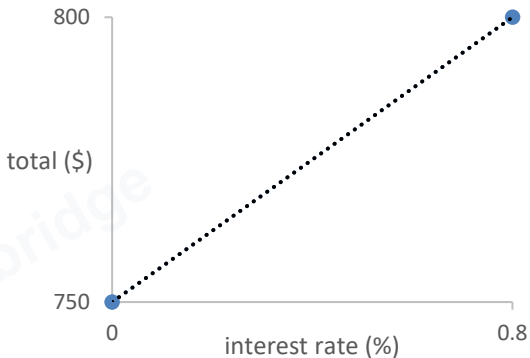
Question	Answer	Marks	Partial Marks	Guidance
8(b)	$[1.04T - T =] P \times 1.04^6 - P \times 1.04$ or $P \times 1.04 (1.04^5 + 1.04^4 + 1.04^3 + 1.04^2 + 1.04^{[1]} - (1.04^4 + 1.04^3 + 1.04^2 + 1.04^{[1]} + 1))$	1	FT their $P \times 1.04^6$	If $1.04T - T$ is written out in full ignore that line unless recovery from 8(a) Check a possible FT by clicking back to 8(a) Do not award this mark for e.g. $P \times 1.04 - P \times 1.04^6$ corrected later or for $1.04(1.04^5 - 1) = P \times 1.04^6 - P \times 1.04$ (working backwards) Factorisation may be in two stages. Accept $1.04P$ for $P \times 1.04$ Must see negative signs if brackets removed
	$T(1.04 - 1)$ or $P \times 1.04(1.04^5 - 1)$ dependent on 1st mark	1		Instead of this factorisation, allow $0.04T$ and then 0.04 on denominator equal to $1.04 - 1$ Accept $1.04P$ for $P \times 1.04$
	Both correct factorisations leading to $T = \frac{1.04P(1.04^5 - 1)}{1.04 - 1}$	1		Dependent on 1st mark

Question	Answer	Marks	Partial Marks	Guidance								
8(c)	$700 = \frac{P \times 1.04 (1.04^5 - 1)}{1.04 - 1} \text{ and}$ $\text{rearrangement to } [P =] \frac{700 \times (1.04 - 1)}{1.04 \times (1.04^5 - 1)}$ or equivalent correct division or equivalent correct equation of form $aP = b$ e.g. $1.04P = 129$ $0.225[\dots] P = 28$ OR $\text{Sketch of } \frac{P \times 1.04 (1.04^5 - 1)}{1.04 - 1}$ and intersecting horizontal line at 700 OR <table border="1"><tr><td>124</td><td>698.[49]</td></tr><tr><td>125</td><td>704.[12]</td></tr></table>	124	698.[49]	125	704.[12]	C2	C1 for $700 = \frac{P \times 1.04 (1.04^5 - 1)}{1.04 - 1}$ oe or C1 for $\frac{700 \times (1.04 - 1)}{1.04 \times (1.04^5 - 1)}$ or equivalent correct division or equivalent correct equation of form $aP = b$ e.g. $1.04P = 129$ $0.225[\dots] P = 28$ OR $\text{Sketch of } \frac{P \times 1.04 (1.04^5 - 1)}{1.04 - 1}$ OR Table of correct values with at least two $P > 100$, P may be decimal	Allow 0.04 for $1.04 - 1$ Allow expansion of bracket on numerator Allow $700 = P(1.04^5 + 1.04^4 + 1.04^3 + 1.04^2 + 1.04^{[1]})$ Allow a different letter (except T) for P Allow $\geq X$ instead of $=$ Allow e.g. 28 on the numerator and $1.04^6 - 1.04$ or 0.2253 on the denominator Accept values which round or truncate to 129 (3 figures) Allow ruled straight line for T Allow 698 to 699 and 704 to 705 <table border="1"><tr><td>124.26</td><td>699.95</td></tr><tr><td>124.27</td><td>700.01</td></tr></table> Scores C1	124.26	699.95	124.27	700.01
124	698.[49]											
125	704.[12]											
124.26	699.95											
124.27	700.01											
	125 or 124.27	1		Accept 124.3								

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Question	Answer	Marks	Partial Marks	Guidance
9	$\frac{250 \times 1.05(1.05^9 - 1)}{1.05 - 1}$	C1		Allow 0.05 on the denominator Condone $1 + \frac{5}{100}$ on numerator without brackets for 1.05
	\$2894.47	1		Accept 2890 or 2894[.5]

Question	Answer	Marks	Partial Marks	Guidance
10(a)	$[T =] \frac{50 \left(1 + \frac{R}{100} \right) \left(\left(1 + \frac{R}{100} \right)^{15} - 1 \right)}{1 + \frac{R}{100} - 1}$	1		Accept $\frac{R}{100}$ as the denominator Accept $\frac{R}{100} + 1$ for $1 + \frac{R}{100}$ Condone brackets for $\left(1 + \frac{R}{100} \right)$ missing only if intention clear in the following line May be seen in stages Condone r for R for this mark only. Condone $R\%$ for $\frac{R}{100}$ for this mark. Award this mark if $P = 50$ substituted later
	Multiplication by $\frac{100}{R}$ seen	1		soi by factor of $\frac{5000}{R}$ or e.g. $\frac{\frac{100+R}{R}}{\frac{100}{R}}$ or $\frac{5000+50R}{\frac{100}{R}}$ nfw May be done in two stages
	Leading to $T = \left(\frac{5000}{R} + 50 \right) \left(\left(1 + \frac{R}{100} \right)^{15} - 1 \right)$ with no errors	1		Missing brackets in the working counts as an error. Condone $T =$ missing

Question	Answer	Marks	Partial Marks	Guidance
10(b)(i)	(Approx.) straight line passing through (0, 750) and approx. (0.8, 800) 	2	B1 for (approx.) straight line with positive gradient passing through either (0, 750) or approx. (0.8, 800) or B1 for slight curve passing through (0, 750) and approx. (0.8, 800)	Fix overlay on (0, 750) “passing through” means At (0, 750) the line or curve must enter the rim of an O annotation centred on (0, 750) At (0.8, 800) the line or curve must enter the box. The line is a slight curve if the $\surd$ annotation fits between the curve and a ruler joining its endpoints. Award B0 if the X annotation fits inside (not touching the edges) of this space Accept as a straight line if neither annotation fits.
10(b)(ii)	$T = mR + c$ where $60.3 \leq m \leq 64.4$ and $c = 750$	2	B1 for $T = mR + c$ where $60.3 \leq m \leq 64.4$ or $c = 750$ or for $mR + c$ where $60.3 \leq m \leq 64.4$ and $c = 750$ or for e.g. $y = mx + c$ where $60.3 \leq m \leq 64.4$ and $c = 750$ or for $R = \frac{1}{m}T - \frac{c}{m}$ where $60.3 \leq m \leq 64.4$ and $c = 750$	Allow $749 \leq c \leq 750$ Allow $mR + c = T$ Allow m as a fraction without decimals e.g. $\frac{125}{2}$ or integers 61, 62, 63 or 64 Not for $x = my + c$ For B1 allow other letters, but if T or R appear, they must be in the correct position.