



Cambridge Lower Secondary Checkpoint

MATHEMATICS**0862/02**

Paper 2

May 2026

MARK SCHEME

Maximum Mark: 50

Published

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 curriculum. 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 has **12** pages. Any blank pages are indicated.

Mark scheme annotations and abbreviations

FT	follow through after error
SC	special case mark
cao	correct answer only
dep	dependent
isw	ignore subsequent working
nfww	not from wrong working
oe	or equivalent
soi	seen or implied

Question	Answer	Marks	Part marks	Guidance									
1	24(°)	1											
2	72	1		Accept ± 72 or −72									
3	(p =) 29	1											
4	7 × 10 ⁴ cao	1		Accept with trailing zeros.									
5	14	1											
6	height in cm	1		Accept any clear indication.									
7	<table><tr><td>input</td><td>output</td></tr><tr><td>(4)</td><td>64</td></tr><tr><td>7</td><td>(343)</td></tr></table>	input	output	(4)	64	7	(343)	2	Award 1 mark for each correct answer.	Do not accept 7 ³ for 7			
input	output												
(4)	64												
7	(343)												
8	$\frac{9}{10}$ oe	1		Is w incorrect: cancelling, converting to a decimal or percentage.									
9	(x =) 6 (y =) 3	2	Award 1 mark for x = 6 or y = 3 or for two values that satisfy one of the original equations.										
10	<table><tr><td></td><td>integer</td><td>not an integer</td></tr><tr><td>natural</td><td>7</td><td></td></tr><tr><td>not natural</td><td>−8</td><td>0.3</td></tr></table>		integer	not an integer	natural	7		not natural	−8	0.3	1		All three answers correct for the mark and no extras.
	integer	not an integer											
natural	7												
not natural	−8	0.3											

Question	Answer	Marks	Part marks	Guidance
11	50 (km/h)	1		
12(a)	350 (cm ³)	1		
12(b)	9	1		Accept any clear indication.
13	$Q = (4, 8)$	2	Award 1 mark for each correct coordinate.	

Question	Answer	Marks	Part marks	Guidance
14	A correct reason related to area used, e.g. • she is only using 1 m² of her garden • it is a small part of the garden • she may not have many plants in that part of the garden or sample size, e.g. • her sample size is small • she is only measuring five plants • she only picks one sample or height sampled, e.g. • plants that are near each other could be similar heights • she only measures the five tallest • she hasn't measured a mixture of heights • she hasn't picked the plants at random.	1		Accept equivalent explanations, e.g. • she only picked part of the garden • they could all be the same type of plant • she doesn't measure the shorter plants • the plants in that area/different areas may have different growing conditions • she only selects some plants in that area she should select them all. Accept suggestions as to how she could have improved her sampling method, e.g. • she should have measured different places/selected more plants. Do not accept these alone (but ignore if also with a correct reason): • she picked part of the garden/the tallest plants/five plants – <i>not using 'only' is just repeating the question</i> • some plants may be taller/shorter – <i>true of all samples</i> • plants are not all the same height – <i>true of all samples</i> • she only selects some plants she should select them all – <i>do not accept a census alone</i> • she does not have enough data.

Question	Answer	Marks	Part marks	Guidance								
15	28	2	Award 1 mark for $\frac{56}{7}$ oe or $h^3 = 8$ or $h = 2$ or for any 3 consecutive terms from 1.75, 3.5, 7, 14, 28, 56, 112, 224..... etc.	Allow for recognition of correct relationship between 56 and 7, e.g. $56 \div 8 = 7$, $7 \times 8 = 56$ Allow [term-to-term rule] $\times 2$ 8 alone or 2 alone scores 0								
16	$y = 4x + 7$ written in the box but not in either circle	1										
17	$(t =) 4$ $(w =) 2$	2	Award 1 mark for each correct answer or for $(t =) 13^4$ and $(w =) 17^2$									
18	<table><tr><td>$-5, -3,$ $-1, 1$</td><td>Subtract 10 [from each term in sequence A]</td><td>$(2n - 7)$</td></tr><tr><td>15, 21, 27, 33</td><td>(Multiply each term in sequence A by 3)</td><td>$6n + 9$ oe, e.g. $3(2n + 3)$</td></tr><tr><td>$(-5, -7,$ $-9, -11)$</td><td>Multiply [each term in sequence A] by -1</td><td>$-2n - 3$ oe, e.g. $-(2n + 3)$</td></tr></table>	$-5, -3,$ $-1, 1$	Subtract 10 [from each term in sequence A]	$(2n - 7)$	15, 21, 27, 33	(Multiply each term in sequence A by 3)	$6n + 9$ oe, e.g. $3(2n + 3)$	$(-5, -7,$ $-9, -11)$	Multiply [each term in sequence A] by -1	$-2n - 3$ oe, e.g. $-(2n + 3)$	3	Award 2 marks for four correct boxes or Award 1 mark for two correct boxes. Ignore anything added to row A and terms following the first four. Allow equivalent statements, e.g. for row E, accept 'make each term negative'. Accept n th terms unsimplified, e.g. $2n + 3$
$-5, -3,$ $-1, 1$	Subtract 10 [from each term in sequence A]	$(2n - 7)$										
15, 21, 27, 33	(Multiply each term in sequence A by 3)	$6n + 9$ oe, e.g. $3(2n + 3)$										
$(-5, -7,$ $-9, -11)$	Multiply [each term in sequence A] by -1	$-2n - 3$ oe, e.g. $-(2n + 3)$										
19	(\$)1026	2	Award 1 mark for $1200 \times \left(1 - \frac{5}{100}\right) \times \left(1 - \frac{10}{100}\right)$ oe	Award 0 for answer 1020 (a common incorrect method of decreasing by 15%).								

Question	Answer	Marks	Part marks	Guidance
20	941 to 942 (mm ²)	3	Award 2 marks for $26^2 + \pi \times \left(\frac{26}{2}\right)^2 \div 2$ oe or Award 1 mark for any of these • $\pi \times \left(\frac{26}{2}\right)^2$ or figs 530.6 to 531.1..., • $\pi \times \left(\frac{26}{2}\right)^2 \div 2$ or figs 265 to 266 • $26^2 + k\pi$, where $k > 0$, working must be shown.	Accept values of π between 3.14 and $\frac{22}{7}$ If converting to different units still award the method marks if figs 26 used, e.g. answer figs 941 to 942 scores 2 marks. Allow figs 1206 to 1207.1... (adding on 26^2) to imply $\pi \times \left(\frac{26}{2}\right)^2$ Do not accept $26^2 + k\pi + c$ 26^2 implied by figs 676 Common wrong working for 1 mark: $26^2 + \pi \times 26^2 \div 2$

Question	Answer	Marks	Part marks	Guidance
21	43 and a correct inequality, e.g. $7k - 6 < 50$ or	4	Award 3 marks for answer 43 without a correct inequality shown or Award 2 marks for $k < 8$ or $k = 7$ or Award 1 mark for either of these $7k - 6 < 50$ or better $7 \times \text{their } k - 6$ correctly evaluated where k is 1, 2, 3, 4, 5 or 6	Accept 43 and a correct inequality shown, e.g. $7k < 56$ for 4 marks but not just $k < 8$ Accept 7 as final answer for 2 marks. For this mark, allow an equation or incorrect inequality sign, e.g. $7k = 56$ scores this mark Correctly reaching 1, 8, 15, 22, 29 or 36
22	Enlargement (scale factor) 4 (3, 1)	3	Award 1 mark for each part correct.	Award 0 marks if more than one transformation but extra properties treat as choice. Allow 3, 1 without brackets. Do not accept centre as a column vector but do not treat as an additional transformation.

Question	Answer	Marks	Part marks	Guidance
23	162 (cm)	3	Award 2 marks for correct method to find the total $2 \times 145 + 5 \times 155 + 10 \times 165 + 3 \times 175$ or Award 1 mark for three correct midpoints from 145, 155, 165, 175 or for correct method to find an estimated total using consistent points within range.	For 3 marks, isw answer $160 \leq h < 170$ following 162 found. For 2 marks, accept one error or omission, e.g. one midpoint incorrect but then correct <i>f</i> $\times$ <i>their</i> midpoint. Implied by $290 + 775 + 1650 + 525$ or 3240 Allow the marks for the method for the total and the midpoints even if not used in working leading to the answer. e.g. using end points of intervals, may be implied by $280 + 750 + 1600 + 510$, 3140 or 157 $300 + 800 + 1700 + 540$, 3340 or 167

Question	Answer	Marks	Part marks	Guidance								
24	Finds the correct distance in metres 53.45 to 53.5... (m) or 53 450 to 53 504 (mm) and 60 000 (mm)	4	Award 3 marks for full method $2 \times \pi \times 304 \times 28 \div 1000$ oe $2 \times \pi \times 304 \times 28$ oe and 60×1000 or Award 2 marks for $2 \times \pi \times 304 \times 28$ oe ignoring incorrect unit conversions $2 \times \pi \times 304 \div 1000$ oe or Award 1 mark for either of these: $2 \times \pi \times 304$ oe ignoring incorrect unit conversions $k\pi \div 1000$ where $k > 1$	Accept values of π between 3.14 and $\frac{22}{7}$ For 4 marks, accept 53, 53.4 or 54, only with correct working or more accurate correct value seen. Oe, e.g. $2 \times \pi \times 0.304 \times 28$ 60×1000 implied by 60 000 Implied by figs 53 450 to 53 504 Oe, e.g. $2 \times \pi \times 0.304$ implied by 1.909 to 1.911 Implied by figs 1909 to 1911 E.g. $\pi \times 304^2 \div 1000$ scores 1 mark. <table><tr><td colspan="2">If working in cm:</td></tr><tr><td>4 marks for</td><td>5345 to 5350.4 (cm) and 6000 (cm)</td></tr><tr><td>3 marks for</td><td>$2 \times \pi \times \frac{304}{10} \times 28$ oe and 60×100</td></tr><tr><td>1 or 2 marks</td><td>Apply normal scheme</td></tr></table>	If working in cm:		4 marks for	5345 to 5350.4 (cm) and 6000 (cm)	3 marks for	$2 \times \pi \times \frac{304}{10} \times 28$ oe and 60×100	1 or 2 marks	Apply normal scheme
If working in cm:												
4 marks for	5345 to 5350.4 (cm) and 6000 (cm)											
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1 or 2 marks	Apply normal scheme											

Question	Answer	Marks	Part marks	Guidance
25	$n^2 + 3$ oe	2	Award 1 mark for any quadratic n th term as final answer or for second difference of 2 found.	At least two second differences shown.
26	$(x =) 24$	3	Award 1 mark for $1040 \div 40$ and Award 1 mark for $10^2 + x^2 = (their\ 26)^2$ or better.	Implied by 26, may be on diagram. Allow 26 as answer for 1 mark. <i>Their</i> 26 must come from correct method. Or better, e.g. $\sqrt{676 - 100}$, $\sqrt{576}$

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