

Cambridge Lower Secondary Checkpoint

MATHEMATICS**0862/01**

Paper 1

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.

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	kilometre	1		Accept any clear indication, e.g. km, 'kilometre' ticked or ringed in the box.
2	8	1		
3	75 (cm ²)	1		
4	$(h =) [\pm] \sqrt{w}$	1		Accept $w^{\frac{1}{2}}$
5	$\frac{1}{6}$ cao	2	Award 1 mark for $\frac{4}{9} \times \frac{k}{8}$ or $\frac{c}{9} \times \frac{3}{8}$ or better.	$\frac{1}{9} \times \frac{3}{2}, \frac{4}{3} \times \frac{1}{8}, \frac{12}{72}, \frac{6}{36}, \frac{3}{18}$ Or better, e.g. $\frac{1}{9} \times \frac{3}{2}, \frac{4}{3} \times \frac{1}{8}, \frac{12}{72}, \frac{6}{36}, \frac{3}{18}$ Must be fractions for part marks.
6	both	1		Accept any clear indication.
7	$\frac{5}{9} = 0.\dot{5}$	1		Accept any clear indication.

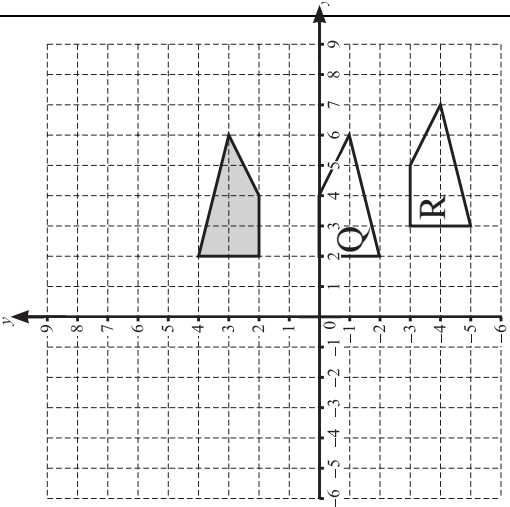
Question	Answer	Marks	Part marks	Guidance
8(a)	A correct explanation, e.g. • he has not measured clockwise • it should be 318° • the bearing should be bigger than 180° • it should be a reflex angle.	1		Accept any correct explanation. BOD for these: • bearings are on the right side. Do not accept vague statements, e.g. • he did not measure the angle properly • it should be more than 42 • he measured from the North line to the nearest line • the bearing should be the bigger one. Clear incorrect statements (even if with a correct statement) invalidate the mark, e.g. • it should be 138/it should be 285 • it should be an obtuse angle • he gave the bearing of C from B.
8(b)	105° and an answer in the range 55 to 59 (km)	2	Award 1 mark for each correct answer.	
9	$\sqrt{24.89}$ 12 $(-6.12)^2$ 5 $\sqrt{144.2}$ 36	1		All three lines correct for the mark. Accept any clear indication.
10	$(n + 5)^2$	1		Accept expanded, e.g. $n^2 + 10n + 25$ but do not isw, e.g. $(n + 5)^2$ becoming $n^2 + 25$ Do not accept an equation, e.g. $n = (n + 5)^2$, but accept with words, e.g. 'number = $(n + 5)^2$,

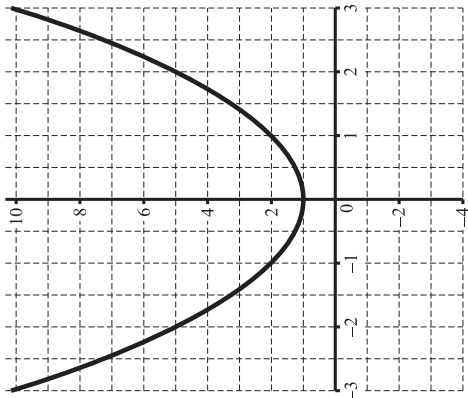
Question	Answer	Marks	Part marks	Guidance										
11	<table><tr><td>correct</td><td>not correct</td></tr><tr><td></td><td>✓</td></tr><tr><td>✓</td><td></td></tr></table>	correct	not correct		✓	✓		1		Both ticks correct for the mark. Accept any clear indication.				
correct	not correct													
	✓													
✓														
12	<table><tr><td>true</td><td>false</td></tr><tr><td></td><td>✓</td></tr><tr><td>✓</td><td></td></tr><tr><td>✓</td><td></td></tr><tr><td></td><td>✓</td></tr></table>	true	false		✓	✓		✓			✓	2	Award 1 mark for three correct ticks.	Accept any clear indication.
true	false													
	✓													
✓														
✓														
	✓													
13	140 (km)	2	Award 1 mark for $210 \div (5 - 2) [\times k]$ oe where $k = 1, 2$ or 5	1 mark may be implied by 70 or 350										
14	$(k =) 13$	1		Ignore any units given.										

Question	Answer	Marks	Part marks	Guidance																																			
15	15	2	Award 1 mark for answer figs ±15 or for $\frac{12 \times 5}{4}$ or any equivalent calculation without decimals (ignoring +/– signs) or for any of these (ignoring +/– signs) • $1.2 \times 5 = 6$ oe • $5 \div 0.4 = 12.5$ oe • $1.2 \div 0.4 = 3$ oe.	E.g. 150, 1.5, –15, –0.15 E.g. $5 \times \frac{12}{10} \div \frac{4}{10}$ E.g. 1.2×5 could be implied by $\frac{6}{k}$ Oe, e.g. $50 \div 4 = 12.5$ Oe, e.g. $12 \div 4 = 3$, allow $\frac{3}{1}$																																			
16(a)	<table><tr><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td>7</td><td>7</td><td>3</td><td>2</td></tr><tr><td></td><td></td><td></td><td>2</td><td>2</td></tr><tr><td></td><td></td><td></td><td>8</td><td>1</td></tr><tr><td></td><td></td><td></td><td></td><td>4</td></tr><tr><td></td><td></td><td></td><td></td><td>0</td></tr><tr><td></td><td></td><td></td><td></td><td>5</td></tr></table> and correct key: 32 (countryside) and 38 (town)							7	7	3	2				2	2				8	1					4					0					5	3	Award 2 marks for a correct, ordered stem-and-leaf diagram or Award 1 mark for two correctly ordered rows and Award 1 mark for correct key.	Ignore any numbers added to the town centre side.
	7	7	3	2																																			
			2	2																																			
			8	1																																			
				4																																			
				0																																			
				5																																			
16(b)	<table><tr><td>town centre</td></tr><tr><td>48</td></tr><tr><td>16</td></tr></table>	town centre	48	16	2	Award 1 mark for each correct answer.																																	
town centre																																							
48																																							
16																																							

Question	Answer	Marks	Part marks	Guidance																																																												
17(a)	All probabilities correctly placed 0.55 0.4 0.45 0.55	2	Award 1 mark for 0.4 or 0.55 in one correct place.	Accept equivalent fractions or percentages.																																																												
17(b)	$\frac{8}{45}$	2	Award 1 mark for clearly identifying eight outcomes, e.g. <table><tr><td>5</td><td>x</td><td>x</td><td>x</td><td>x</td><td>x</td><td>x</td><td>x</td><td>x</td><td>x</td></tr><tr><td>4</td><td>x</td><td>(x)</td><td>x</td><td>(x)</td><td>x</td><td>(x)</td><td>x</td><td>(x)</td><td>x</td></tr><tr><td>3</td><td>x</td><td>x</td><td>x</td><td>x</td><td>x</td><td>x</td><td>x</td><td>x</td><td>x</td></tr><tr><td>2</td><td>x</td><td>(x)</td><td>x</td><td>(x)</td><td>x</td><td>(x)</td><td>x</td><td>(x)</td><td>x</td></tr><tr><td>1</td><td>x</td><td>x</td><td>x</td><td>x</td><td>x</td><td>x</td><td>x</td><td>x</td><td>x</td></tr><tr><td></td><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td></tr></table> or $\frac{8}{k}$ where $k > 8$ or $\frac{c}{45}$ where $0 < c < 45$ or $\frac{2}{5} \times \frac{4}{9}$	5	x	x	x	x	x	x	x	x	x	4	x	(x)	x	(x)	x	(x)	x	(x)	x	3	x	x	x	x	x	x	x	x	x	2	x	(x)	x	(x)	x	(x)	x	(x)	x	1	x	x	x	x	x	x	x	x	x		1	2	3	4	5	6	7	8	9	Is wrong incorrect cancelling, or converting to decimal or percentage. The mark for $\frac{8}{k}$ or $\frac{c}{45}$ can be awarded before any cancelling, e.g. $\frac{8}{14} = \frac{4}{7}$ scores 1 k and c are whole numbers.
5	x	x	x	x	x	x	x	x	x																																																							
4	x	(x)	x	(x)	x	(x)	x	(x)	x																																																							
3	x	x	x	x	x	x	x	x	x																																																							
2	x	(x)	x	(x)	x	(x)	x	(x)	x																																																							
1	x	x	x	x	x	x	x	x	x																																																							
	1	2	3	4	5	6	7	8	9																																																							

Question	Answer	Marks	Part marks	Guidance
18	$(y =) \frac{1}{2}x + 3$	2	Award 1 mark for gradient = $\frac{1}{2}$ oe or $(y =) mx + 3$ where $m \neq 0$ or $c = 3$	For 2 marks, accept equivalents with y as the subject, e.g. $y = \frac{x+6}{2}$ Accept equivalent fractions or decimal for $\frac{1}{2}$ for 1 or 2 marks. Not just $\frac{1}{2}$ alone, needs to be clearly associated with gradient, e.g. following a rise/run calculation or $\frac{1}{2}x$. m can be left algebraic. Not for ‘y-intercept = 3’ alone, it must be clearly associated with c.
19	12	2	Award 1 mark for $\frac{360}{180-150}$ oe or $\frac{180(n-2)}{n} = 150$ oe	
20	0.00123	1		Allow $\frac{123}{100000}$ but not with decimals, e.g. $\frac{12.3}{10000}$

Question	Answer	Marks	Part marks	Guidance
21	✓ ✓	1		Both ticks correct for the mark. Accept any clear indication.
22	10, 11, 12, 13, 14 or 15	1		
23	Shape R correct. Vertices at $(3, -3)$, $(5, -3)$, $(3, -5)$, $(7, -4)$ 	2	Award 1 mark for correct position of shape Q or for correct translation of $\begin{pmatrix} 1 \\ -3 \end{pmatrix}$ of <i>their</i> shape Q.	Award 2 marks for shape R correct with or without shape Q drawn. Ignore labels for 2 marks. Accept slight inaccuracies provided the intention is clear, e.g. unruled. (2-mark shape inside green overlay). (1-mark shape inside pink overlay). Ignore labels. <i>Their</i> shape R does not have to be congruent to the original shape for the FT but must all fit on grid. At least one of the shapes must be labelled for the FT.

Question	Answer	Marks	Part marks	Guidance																
24	<table><tr><td>true</td><td>☒</td><td>false</td><td>☐</td></tr><tr><td></td><td>☐</td><td></td><td>☒</td></tr><tr><td></td><td>☐</td><td></td><td>☒</td></tr><tr><td></td><td>☒</td><td></td><td>☐</td></tr></table>	true	☒	false	☐		☐		☒		☐		☒		☒		☐	2	Award 1 mark for three correct ticks.	Accept any clear indication.
true	☒	false	☐																	
	☐		☒																	
	☐		☒																	
	☒		☐																	
25	(LB $\Rightarrow$) 11.295 cao (UB $\Rightarrow$) 11.305 cao	2	Award 1 mark for each correct bound or for both values correct but reversed.																	
26	A correct curve for values of x between -3 and 3 	4	Award 2 marks for correctly completed table of values <table border="1"><tr><td>x</td><td>-3</td><td>-2</td><td>-1</td><td>0</td><td>1</td><td>2</td><td>3</td></tr><tr><td>y</td><td>10</td><td>5</td><td>2</td><td>1</td><td>2</td><td>5</td><td>10</td></tr></table> or Award 1 mark for three correct values in table and Award 1 mark for five points correctly plotted, FT <i>their</i> table.	x	-3	-2	-1	0	1	2	3	y	10	5	2	1	2	5	10	If clearly ruled, but otherwise correct, award 3 marks. Correct points can imply these marks. For this mark, curve can imply points. If more than 7 points plotted firstly mark points on any curves/lines. In the absence of a curve apply the choice rule.
x	-3	-2	-1	0	1	2	3													
y	10	5	2	1	2	5	10													

Question	Answer	Marks	Part marks	Guidance
27	$250 - x^2 - 3x$ (cm ²) oe simplified	3	Award 1 mark for a correct expression $20 \times 12 - (x - 2)(x + 5)$ oe or better and Award 1 mark for four correct terms from either of these $\pm x^2 + 2x - 5x \pm 10$ $\pm x^2 - 2x + 5x \pm 10$ or for three correct terms from either of these $x^2 - 2x + 5x - 10$ or better $-x^2 + 2x - 5x + 10$ or better or for (if finding a rectangle area from part of the shaded shape) the expansion of <i>their</i> brackets with three terms correct oe. Must be of the form $(\pm x \pm a)(\pm x \pm b)$ with at least one negative sign.	Oe simplified, e.g. 3 marks for $250 - (x^2 + 3x)$ Accept omission of final bracket. Or better, e.g. 1 mark for $240 - (x - 2)(x + 5)$ First two marks for these: $240 - (x^2 + 3x - 10)$, $240 - x^2 - 3x + 10$ Accept expansion first then the first mark is for $20 \times 12 - (\text{their expansion of } (x - 2)(x + 5))$ oe. $\pm 3x$ counts as two correct terms. $3x$ counts as two correct terms. $-3x$ counts as two correct terms. If adding two or more rectangles: Award 1 mark for a correct expression, e.g. $(14 - x)(x + 5) + 12(15 - x)$ oe $20(14 - x) + (15 - x)(x - 2)$ oe $(14 - x)(x + 5) + (14 - x)(15 - x) + (15 - x)(x - 2)$ and Award 1 mark for three correct terms from expanding, e.g. $(14 - x)(x + 5) = 14x + 70 - x^2 - 5x$ $(15 - x)(x - 2) = 15x - x^2 - 30 + 2x$ $(14 - x)(15 - x) = 210 - 15x - 14x + x^2$ Note for method: $14 - x$ can be $12 - (x - 2)$ $15 - x$ can be $20 - (x + 5)$ then must reach a comparable number of correct terms when expanding.

Appendix – additional guidance for marking responses from candidates who have used A3 enlarged 36pt font scripts

The table below lists modifications made on the A3 script with 36pt font, only where a different approach to marking is required.

In all cases, use your professional judgement when marking and add a comment if required. If in doubt, contact your assessment manager.

Question	Modification	Marks	Marking guidance
8(b)	Image enlarged by scale factor 2	2	Use standard mark scheme but replace: an answer in the range 55 to 59 (km) with: an answer in the range 110 to 120 (km)