

GCSE

Applications of Mathematics (Linked Pair)

Higher Tier Unit 2 – Geometry and Measures
Mark scheme

9370/2H

November 2016

Version/Stage: 1.0 Final

Mark schemes are prepared by the Lead Assessment Writer and considered, together with the relevant questions, by a panel of subject teachers. This mark scheme includes any amendments made at the standardisation events which all associates participate in and is the scheme which was used by them in this examination. The standardisation process ensures that the mark scheme covers the students' responses to questions and that every associate understands and applies it in the same correct way. As preparation for standardisation each associate analyses a number of students' scripts. Alternative answers not already covered by the mark scheme are discussed and legislated for. If, after the standardisation process, associates encounter unusual answers which have not been raised they are required to refer these to the Lead Assessment Writer.

It must be stressed that a mark scheme is a working document, in many cases further developed and expanded on the basis of students' reactions to a particular paper. Assumptions about future mark schemes on the basis of one year's document should be avoided; whilst the guiding principles of assessment remain constant, details will change, depending on the content of a particular examination paper.

Further copies of this mark scheme are available from aqa.org.uk

Glossary for Mark Schemes

GCSE examinations are marked in such a way as to award positive achievement wherever possible. Thus, for GCSE Mathematics papers, marks are awarded under various categories.

M	Method marks are awarded for a correct method which could lead to a correct answer.
M dep	A method mark dependent on a previous method mark being awarded.
A	Accuracy marks are awarded when following on from a correct method. It is not necessary to always see the method. This can be implied.
B	Marks awarded independent of method.
B dep	A mark that can only be awarded if a previous independent mark has been awarded.
Q	Marks awarded for quality of written communication.
ft	Follow through marks. Marks awarded for correct working following a mistake in an earlier step.
SC	Special case. Marks awarded for a common misinterpretation which has some mathematical worth.
oe	Or equivalent. Accept answers that are equivalent. eg accept 0.5 as well as $\frac{1}{2}$
[a, b]	Accept values between a and b inclusive.
25.3 ...	Allow answers which begin 25.3 e.g. 25.3, 25.31, 25.378.
Use of brackets	It is not necessary to see the bracketed work to award the marks.

Examiners should consistently apply the following principles

Diagrams

Diagrams that have working on them should be treated like normal responses. If a diagram has been written on but the correct response is within the answer space, the work within the answer space should be marked. Working on diagrams that contradicts work within the answer space is not to be considered as choice but as working, and is not, therefore, penalised.

Responses which appear to come from incorrect methods

Whenever there is doubt as to whether a candidate has used an incorrect method to obtain an answer, as a general principle, the benefit of doubt must be given to the candidate. In cases where there is no doubt that the answer has come from incorrect working then the candidate should be penalised.

Questions which ask candidates to show working

Instructions on marking will be given but usually marks are not awarded to candidates who show no working.

Questions which do not ask candidates to show working

As a general principle, a correct response is awarded full marks.

Misread or miscopy

Candidates often copy values from a question incorrectly. If the examiner thinks that the candidate has made a genuine misread, then only the accuracy marks (A or B marks), up to a maximum of 2 marks are penalised. The method marks can still be awarded.

Further work

Once the correct answer has been seen, further working may be ignored unless it goes on to contradict the correct answer.

Choice

When a choice of answers and/or methods is given, mark each attempt. If both methods are valid then M marks can be awarded but any incorrect answer or method would result in marks being lost.

Work not replaced

Erased or crossed out work that is still legible should be marked.

Work replaced

Erased or crossed out work that has been replaced is not awarded marks.

Premature approximation

Rounding off too early can lead to inaccuracy in the final answer. This should be penalised by 1 mark unless instructed otherwise.

Continental notation

Accept a comma used instead of a decimal point (for example, in measurements or currency), provided that it is clear to the examiner that the candidate intended it to be a decimal point.

Q	Answer	Mark	Comments
1	\times \checkmark	B2	B1 for each correct answer

2(a)	$1.2 \times 0.8 \times 2 + 1.2 \times 0.6 \times 2$ $+ 0.8 \times 0.6 \times 2 = 4.32$ or $0.96 \times 2 + 0.72 \times 2 + 0.48 \times 2 = 4.32$ or $2(0.96 + 0.72 + 0.48) = 4.32$ or $1.92 + 1.44 + 0.96 = 4.32$	B2	B1 $1.2 \times 0.8 (\times 2)$ or 0.96 or 1.92 or $1.2 \times 0.6 (\times 2)$ or 0.72 or 1.44 or $0.8 \times 0.6 (\times 2)$ or 0.48 or 0.96
	Additional Guidance		
	$1.2 \times 0.8 \times 0.6$		B0

2(b)	Alternative method 1				
	$4.32 \times 3 \times 8$ or 103.68		M1	oe	
	15×6.5 or 97.5		M1		
	103.68 and 97.5 and No		A1		
	Alternative method 2				
	4.32×3 or 12.96	4.32×8 or 34.56	$4.32 \div 6.5$ or 0.66...	M1	
	their 12.96 $\times 8 \div 6.5$	their 34.56 $\times 3 \div 6.5$	their 0.66... $\times 3 \times 8$	M1dep	oe
	[15.9, 16] and No		A1		

Mark scheme for Q2(b) continues on the next page

Q	Answer			Mark	Comments
2(b)	Alternative method 3				
	4.32 × 3 or 12.96	4.32 × 8 or 34.56	4.32 ÷ 15 or 0.288	M1	
	their 12.96 × 8 ÷ 15	their 34.56 × 3 ÷ 15	their 0.288 × 3 × 8	M1dep	oe
	6.9... and No			A1	
	Alternative method 4				
	4.32 × 3 or 12.96			M1	
	15 × 6.5 ÷ their 12.96 or 97.5 ÷ their 12.96			M1dep	
	7.5... and No			A1	
	Alternative method 5				
	4.32 × 8 or 34.56			M1	
	15 × 6.5 ÷ their 34.56 or 97.5 ÷ their 34.56			M1dep	
	2.8... and No			A1	

Q	Answer	Mark	Comments
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3	$20 \div (1 + 3)$ or $20 \div 4$ or 5	M1	red in 20 litres of light pink
	their 5×3 or 15	M1dep	white in 20 litres of light pink
	their 15×2 or 30	M1dep	dep on M2 red needed for dark pink
	25	A1	

4(a)	Pam has $(80 + x)$ beads Ellie has $(44 - x)$ beads	B1	
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Q	Answer	Mark	Comments
4(b)	Alternative method 1		
	$80 + x = 3(44 - x)$	B1ft	Correct equation or ft their (a) Missing brackets may be recovered
	$80 + x = 132 - 3x$	M1	Expands their bracket, allow one error
	$x + 3x = 132 - 80$	M1	Collects terms for their equation Allow one sign error their equation must have x on both sides
	13	Q1ft	Strand (ii) Their equation solved correctly ft their (a) if M2 and no errors SC3 13 with no equation
	Alternative method 2		
	$3y + y = 80 + 44$ or $4y = 124$	B1	oe correct equation y is the number of beads Ellie now has
	$(y =) 124 \div 4$ or 31	M1	
	44 – their 31 or $3 \times$ their 31 – 80 or $93 - 80$	M1dep	
	13	Q1	Strand (ii) Correct answer with correct equation seen SC3 13 with no equation

Additional Guidance on next page

Q	Answer	Mark	Comments
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Additional Guidance				
4(b)	$80 + x = 3(44 + x)$		B1	
	$80 + x = 132 + 3x$		M1	
	$80 - 132 = 3x - x$		M1	
	-26	(do not ft if solution is negative)		Q0
	$80 - x = 3(44 + x)$			B1ft
	$80 - x = 132 + 3x$			M1
	$80 - 132 = 3x + x$			M1
	-13	(do not ft if solution is negative)		Q0
	$80 - x = 3(44 - x)$			B1ft
	$80 - x = 132 - 3x$			M1
	$3x - x = 132 - 80$			M1
	26			Q1ft
	$80 + x = 3(44 + x)$			B1ft
	$80 + x = 132 + 3x$			M1
	$80 + 132 = 3x - x$	(1 error)		M1
106	(do not ft if error(s) made)		Q0	

Q	Answer	Mark	Comments
5	Any multiple of 60	M1	eg 60 or 120 or 180 Accept in a list of multiples
	(Number of packs of patties =) their multiple \div 15 or 8 or (Number of packs of bread rolls =) their multiple \div 20 or 6	M1dep	Implied by £65.92 or £19.5(0)
	85.42	A1	SC2 Any multiple of 42.71 apart from 85.42 eg 42.71 or 128.13 or 170.84 or 213.55

Q	Answer	Mark	Comments
6	Alternative method 1		
	$22 \times 15 \times 5$ or 1650	M1	
	3.96 \div their 1650 or 0.0024 or their 1650 \div 3.96 or [416.6, 416.7]	M1dep	oe
	$\pi \times 10 \times 10 \times 5$ or 500π or [1570, 1571]	M1	
	their [1570, 1571] \times their 0.0024 or their [1570, 1571] \div their [416.6, 416.7] or [3.76, 3.771]	M1dep	oe dep on M3
	their [3.76, 3.771] \times 1.5(0) or [5.64, 5.66]	M1dep	oe dep on M4
	5.64 or 5.65 or 5.66	Q1	Strand (i) Must use correct money notation
	Alternative method 2		
	$22 \times 15 \times 5$ or 1650	M1	
	$\pi \times 10 \times 10 \times 5$ or 500π or [1570, 1571]	M1	
	their [1570, 1571] \div their 1650 or 0.95... or their 1650 \div their [1570, 1571] or [1.05, 1.051]	M1dep	dep on M2
	their 0.95... \times 3.96 or 3.96 \div their [1.05, 1.051] or [3.76, 3.771]	M1dep	oe dep on M3
	their [3.76, 3.771] \times 1.5(0) or [5.64, 5.66]	M1dep	oe dep on M4
	5.64 or 5.65 or 5.66	Q1	Strand (i) Must use correct money notation

Q	Answer	Mark	Comments
6	Alternative method 3		
	$22 \times 15 \times 5$ or 1650	M1	
	$3.96 \div$ their 1650 or 0.0024	M1dep	oe
	their 0.0024 \times 1.5(0) or 0.0036	M1dep	oe dep on M2
	$\pi \times 10 \times 10 \times 5$ or 500π or [1570, 1571]	M1	
	their [1570, 1571] \times their 0.0036 or [5.64, 5.66]	M1dep	oe dep on M4
	5.64 or 5.65 or 5.66	Q1	Strand (i) Must use correct money notation
	Alternative method 4		
	22×15 or 330	M1	Using total surface area M0
	$3.96 \div$ their 330 or 0.012 or their $330 \div 3.96$ or 83.3...	M1dep	oe
	$\pi \times 10 \times 10$ or [314, 314.2]	M1	
	their [314, 314.2] \times their 0.012 or their $[314, 314.2] \div$ their 83.3... or [3.76, 3.771]	M1dep	oe dep on M3
	their [3.76, 3.771] \times 1.5(0) or [5.64, 5.66]	M1dep	oe dep on M4
	5.64 or 5.65 or 5.66	Q1	Strand (i) Must use correct money notation

Q	Answer	Mark	Comments
6	Alternative method 5		
	22×15 or 330	M1	Using total surface area M0
	$\pi \times 10 \times 10$ or [314, 314.2]	M1	
	their [314, 314.2] \div their 330 or 0.95... or their 330 \div their [314, 314.2] or [1.05, 1.051]	M1dep	dep on M2
	their 0.95... \times 3.96 or 3.96 \div their [1.05, 1.051] or [3.76, 3.771]	M1dep	oe dep on M3
	their [3.76, 3.771] \times 1.5(0) or [5.64, 5.66]	M1dep	oe dep on M4
	5.64 or 5.65 or 5.66	Q1	Strand (i) Must use correct money notation
	Alternative method 6		
	22×15 or 330	M1	Using total surface area M0
	3.96 \div their 330 or 0.012	M1dep	oe
	their 0.012 \times 1.5(0) or 0.018	M1dep	oe dep on M2
	$\pi \times 10 \times 10$ or 100π or [314, 314.2]	M1	
	their [314, 314.2] \times their 0.018 or [5.64, 5.66]	M1dep	oe dep on M4
	5.64 or 5.65 or 5.66	Q1	Strand (i) Must use correct money notation
	Additional Guidance		
	Must consistently use volumes or consistently use base areas		
	For all method marks, may work in pence		

Q	Answer	Mark	Comments
7	Two correct trials [8.55, 8.65] which bracket 780 and 8.6 as final answer	B4	B3 As B4 response but 8.6 not the final answer or two correct trials [8.5, 8.6] which bracket 780 and 8.6 as final answer B2 Two correct trials [8.1, 9] B1 One correct trial [8.1, 9]
	Additional Guidance		
	Ignore incorrect trials		

Additional Guidance continues on the next page

Q	Answer	Mark	Comments
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7	Many 'correct' trials are shown in the table																																												
	<table border="1"> <thead> <tr> <th data-bbox="596 389 745 454">Trial</th> <th data-bbox="745 389 1107 454">Acceptable values</th> </tr> </thead> <tbody> <tr><td data-bbox="596 454 745 519">8.1</td><td data-bbox="745 454 1107 519">[662, 663]</td></tr> <tr><td data-bbox="596 519 745 584">8.2</td><td data-bbox="745 519 1107 584">[685, 686]</td></tr> <tr><td data-bbox="596 584 745 649">8.3</td><td data-bbox="745 584 1107 649">[709, 710]</td></tr> <tr><td data-bbox="596 649 745 714">8.4</td><td data-bbox="745 649 1107 714">[733, 734]</td></tr> <tr><td data-bbox="596 714 745 779">8.5</td><td data-bbox="745 714 1107 779">[758, 759]</td></tr> <tr><td data-bbox="596 779 745 844">8.55</td><td data-bbox="745 779 1107 844">[771, 771.2314]</td></tr> <tr><td data-bbox="596 844 745 909">8.56</td><td data-bbox="745 844 1107 909">[773, 774]</td></tr> <tr><td data-bbox="596 909 745 974">8.57</td><td data-bbox="745 909 1107 974">[776, 776.313]</td></tr> <tr><td data-bbox="596 974 745 1039">8.58</td><td data-bbox="745 974 1107 1039">[778,779]</td></tr> <tr><td data-bbox="596 1039 745 1104">8.59</td><td data-bbox="745 1039 1107 1104">[781, 781.42]</td></tr> <tr><td data-bbox="596 1104 745 1169">8.6</td><td data-bbox="745 1104 1107 1169">[783, 784]</td></tr> <tr><td data-bbox="596 1169 745 1234">8.61</td><td data-bbox="745 1169 1107 1234">[786, 787]</td></tr> <tr><td data-bbox="596 1234 745 1299">8.62</td><td data-bbox="745 1234 1107 1299">[789, 789.113]</td></tr> <tr><td data-bbox="596 1299 745 1364">8.63</td><td data-bbox="745 1299 1107 1364">[791, 792]</td></tr> <tr><td data-bbox="596 1364 745 1429">8.64</td><td data-bbox="745 1364 1107 1429">[794, 794.3]</td></tr> <tr><td data-bbox="596 1429 745 1494">8.65</td><td data-bbox="745 1429 1107 1494">[796, 797]</td></tr> <tr><td data-bbox="596 1494 745 1559">8.7</td><td data-bbox="745 1494 1107 1559">[809, 810]</td></tr> <tr><td data-bbox="596 1559 745 1624">8.8</td><td data-bbox="745 1559 1107 1624">[836, 836.4]</td></tr> <tr><td data-bbox="596 1624 745 1688">8.9</td><td data-bbox="745 1624 1107 1688">[863, 863.4]</td></tr> <tr><td data-bbox="596 1688 745 1753">9</td><td data-bbox="745 1688 1107 1753">891</td></tr> </tbody> </table>			Trial	Acceptable values	8.1	[662, 663]	8.2	[685, 686]	8.3	[709, 710]	8.4	[733, 734]	8.5	[758, 759]	8.55	[771, 771.2314]	8.56	[773, 774]	8.57	[776, 776.313]	8.58	[778,779]	8.59	[781, 781.42]	8.6	[783, 784]	8.61	[786, 787]	8.62	[789, 789.113]	8.63	[791, 792]	8.64	[794, 794.3]	8.65	[796, 797]	8.7	[809, 810]	8.8	[836, 836.4]	8.9	[863, 863.4]	9	891
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Q	Answer	Mark	Comments
8(a)	180 – 139	M1	
	41	A1	
8(b)	73.5 ÷ 42 or 1.75 or 42 ÷ 73.5 or 0.57...	M1	
	34 × their 1.75 or 34 ÷ their 0.57... or 59.5 or 26 × their 1.75 or 26 ÷ their 0.57... or 45.5 or (42 + 34 + 26) × their 1.75 or 102 × their 1.75 or (42 + 34 + 26) ÷ their 0.57... or 102 ÷ their 0.57...	M1dep	
	178.5	A1	
9(a)	3.5 × 7 or 24.5	M1	
	their 24.5 + 2 + 2 or their 24.5 + 4 or 28.5	M1dep	Allow 2 tan 45 or $\frac{2}{\tan 45}$ for 2
	(a =) 24.5 and (b =) 28.5	A1	
9(b)	2 × their 24.5 or 49 or 2 × their 28.5 or 57 or their 24.5 + their 28.5 or 53	M1	
	108	A1ft	ft their <i>a</i> and <i>b</i>
Q	Answer	Mark	Comments

10	Alternative method 1		
	Use of tan with a fraction using 200 and 157	M1	eg $\tan = 157 \div 200$
	$\tan x = \frac{200}{157}$ or $\tan x = 1.27\dots$	M1dep	oe eg $90 - \tan^{-1} \frac{157}{200}$
	[51.8, 51.9] or 52	A1	
	Alternative method 2		
	Use of sin with a fraction using 200 and $\sqrt{157^2 + 200^2}$ or use of cos with a fraction using 157 and $\sqrt{157^2 + 200^2}$	M1	$\sqrt{157^2 + 200^2} = \sqrt{64\,649}$ = 254.26... or 254.3
$\sin x = \frac{200}{\sqrt{157^2 + 200^2}}$ or $\sin x = 0.78\dots$ or 0.79 or $\cos x = \frac{157}{\sqrt{157^2 + 200^2}}$ or $\cos x = 0.61\dots$ or 0.62	M1dep	oe	
[51.8, 51.9] or 52	A1		

11(a)	$2.9 \times 2.9 \times 2.9$ or 24.3(89) or 24.39 or 24.4	M1	oe
	$256 \div$ their 24.389 or 10.4(...)	M1	their 24.389 must be a volume
	10.5	A1	

11(b)	13.2×19.3 or 254 or 254.7(6) or 254.8 or 255	M1	
	254 or 254.7(6) or 254.8 or 255 and No	A1	oe decision eg silver is heavier

Q	Answer	Mark	Comments
12(a)	$12 - 5 \sin (30 \times 12) = 12$ or $12 - 5 \sin 360 = 12$ or $\sin 360 = 0$	B1	
	Additional Guidance		
	12 – 0 (no other working)		B0
12(b)	Plots at least 6 points ($\pm \frac{1}{2}$ square)	M1	Points are implied by a graph passing through the points
	Smooth curve passing through all 13 points ($\pm \frac{1}{2}$ square)	A1	Points are implied by a curve passing through the points
12(c)	Line $d = 14$ drawn or t value(s) at $d = 14$ indicated or 6.8 (h) or 6 h 48 min or 11.2 (h) or 11 h 12 min or 4.4 (h)	M1	ft their graph at $d = 14$ ($\pm \frac{1}{2}$ square)
	4 h 24 min	A1ft	ft their graph at $d = 14$ ($\pm \frac{1}{2}$ square) Must have two t values to ft

Q	Answer	Mark	Comments
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13	$5^2 + 5^2$ or $25 + 25$ or 50 or $2.5^2 + 2.5^2$ or $6.25 + 6.25$ or 12.5	M1	oe
	$9^2 - \left(\frac{\sqrt{\text{their } 50}}{2}\right)^2$ or $81 - 12.5$ or 68.5 or $\sqrt{X^2 + \left(\frac{\sqrt{\text{their } 50}}{2}\right)^2} = 9^2$ or $\sqrt{X^2 + 12.5} = 81$	M1dep	oe
	$\sqrt{\text{their } 68.5}$ or $[8.2, 8.3]$	M1dep	oe dep on M2
	$[13.2, 13.3]$	A1	

14(a)	$\frac{75}{360}$ or $\frac{5}{24}$ or $0.208\dots$ or 0.21 or $\frac{360}{75}$ or $\frac{24}{5}$ or 4.8	M1	oe
	their $\frac{75}{360} \times 2 \times \pi \times 12$ or $2 \times \pi \times 12 \div \text{their } 4.8$ or 5π or $[15.7, 15.71]$	M1dep	oe
	$5\pi + 24$ or $[39.7, 39.71]$	A1	

Q	Answer	Mark	Comments
14(b)	Alternative method 1		
	$\sin \frac{75}{2} = \frac{x}{12}$ or $\sin 37.5 = \frac{x}{12}$	M1	oe x can be any letter
	$2 \times 12 \times \sin \frac{75}{2}$ or $2 \times 12 \times \sin 37.5$	M1dep	oe
	14.6(...)	A1	
	Alternative method 2		
	$\cos \frac{180-75}{2} = \frac{x}{12}$ or $\cos 52.5 = \frac{x}{12}$	M1	oe x can be any letter
	$2 \times 12 \times \cos \frac{180-75}{2}$ or $2 \times 12 \times \cos 52.5$	M1dep	oe
	14.6(...)	A1	
	Alternative method 3		
	$12^2 + 12^2 - 2 \times 12 \times 12 \times \cos 75$ or [213.4, 213.5]	M1	oe
	$\sqrt{\text{their [213.4, 213.5]}}$	M1dep	
	14.6(...)	A1	
	Alternative method 4		
	$\frac{x}{\sin 75} = \frac{12}{\sin \left(\frac{180-75}{2} \right)}$ or $\frac{x}{\sin 75} = \frac{12}{\sin 52.5}$	M1	oe x can be any letter
	$\frac{12}{\sin \text{their } 52.5} \times \sin 75$	M1dep	
	14.6(...)	A1	

Q	Answer	Mark	Comments
15(a)	$\frac{1}{3} \times \pi \times 12 \times 12 \times 27$ or 1296π or [4069, 4072.032]	M1	oe
	$\frac{1}{3} \times \pi \times 20 \times 20 \times 45$ or 6000π or [18 840, 18 852]	M1	oe
	$6000\pi - 1296\pi (= 4704\pi)$	A1	

15(b)	$39.6 \div 18$ or 2.2 or $18 \div 39.6$ or 0.45...	M1	
	(their 2.2) ³ or 10.648 or (their 0.45...) ³ or 0.09...	M1dep	
	$4704\pi \times$ their 10.648 ($\div 1000$) or $4704\pi \div$ their 0.09... ($\div 1000$) or [157 276, 157 400] ($\div 1000$)	M1dep	dep on M2
	[157.276, 157.4] or 157	A1	

Q	Answer	Mark	Comments
16(a)	Alternative method 1		
	Correct attempt at a distance using area	M1	eg (Suzy) $0.5 \times 40 \times 7$ or 140 or (Suzy) 240×7 or 1680 or (Joe) $0.5 \times 40 \times 8$ or 160 or (Joe) 220×8 or 1760
	Correct attempt at a distance for Suzy and Joe for the same value of t	M1dep	eg ($t = 100$) (Suzy) $0.5 \times 40 \times 7 + 60 \times 7$ or 560 and (Joe) $0.5 \times 40 \times 8 + 40 \times 8$ or 480
	Works out distance for 180 seconds for Suzy and Joe as 1120 (m)	A1	
	1120 is between 800 and 1200	Q1	Strand (ii) Correct explanation after 1120 (m) identified
	Alternative method 2		
	$0.5 \times 40 \times 7 + 7(t - 40)$ or $0.5 \times 40 \times 8 + 8(t - 60)$	M1	oe t is the time when they have travelled the same distance
	$0.5 \times 40 \times 7 + 7(t - 40) =$ $0.5 \times 40 \times 8 + 8(t - 60)$	M1dep	oe
	$t = 180$	A1	
	1120 is between 800 and 1200	Q1	Strand (ii) Correct explanation after 1120 (m) identified

Q	Answer	Mark	Comments
16(b)	$\frac{7}{40}$ or 0.175	B1	oe
	m/s ² or ms ⁻² or metres per second per second	B1	oe
	Additional Guidance		
	Allow a mix of words and symbols eg 0.175 metres per s ² 0.5 m/s per second		B1 B1 B0 B1
17(a)	$ka = 4845$ or $ka^2 = 4941.9$	M1	oe
	$\frac{4941.9}{4845}$ or $4845a = 4941.9$	M1dep	oe
	1.02	A1	oe
17(b)	4845 ÷ their 1.02 or 4941.9 ÷ (their 1.02) ²	M1	their 1.02 from (a)
	4750	A1ft	ft their 1.02
	Additional Guidance		
	ft answers to 2sf or better		