

Question			Answer	Marks	Part marks and guidance																
1		(a)	<table border="1"> <tr> <td></td> <td>3</td> <td>4</td> <td>5</td> </tr> <tr> <td>3</td> <td>4</td> <td>5</td> <td>6</td> </tr> <tr> <td>4</td> <td>5</td> <td>6</td> <td>7</td> </tr> <tr> <td>5</td> <td>6</td> <td>7</td> <td></td> </tr> </table>		3	4	5	3	4	5	6	4	5	6	7	5	6	7		2	B1 for at least 7 correct values in the table
	3	4	5																		
3	4	5	6																		
4	5	6	7																		
5	6	7																			
		(b)	$\frac{8}{16}$ oe	1FT	lsw if final answer comes from simplifying $\frac{8}{16}$ Accept decimal, percentage with % but not ratio or "in".																
		(c)	$\frac{4}{16}$ oe	1FT	lsw if final answer comes from simplifying $\frac{4}{16}$ Do not penalise ratio or "in" if already penalised in (b)																

Question		Answer	Marks	Part marks and guidance	
2		42.09[...] with correct working	4	<p>Correct working requires evidence of at least M1</p> <p>Do not accept starting with 42.1 and working backwards</p> <p>Candidates should use the π button or 3.142. Accept 3.14 and 22/7 for max of M3</p> <p>M1 may be in two steps or seen as diameter here and diameter/2 in the area calculation</p> <p><i>their</i> 3.66 must come from a calculation involving π</p> <p>M3 for $\pi \times \left(\frac{23}{2\pi}\right)^2$</p> <p>OR</p> <p>M1 for $23 \div 2\pi$ or $23 = 2\pi r$ or $23 = \pi d$</p> <p>A1 for 3.66[...]</p> <p>M1 for $\pi \times (\text{their } 3.66)^2$</p> <p>If 0 or 1 scored, instead award SC2 for 42.09[...] with no or insufficient working</p> <p>If 0 scored, instead award SC1 for 3.66[...], 42.08[...], 42.10[...], 42.11[. ...] or 168[. ...] with no or insufficient working</p>	

Question			Answer	Marks	Part marks and guidance
3			8 min 15 sec	4	<p>B3 for 8.25 or $8\frac{1}{4}$ or $8\frac{15}{60}$ or for answer 8m 25s</p> <p>OR</p> <p>M1 for $3.3 \times 10^{-6} \times 1.5 \times 10^8$ oe soi by figs 495 and M1FT for (<i>their</i> $495 \div 60$)</p> <p>eg $\frac{1.5 \times 10^8}{303030\{.3\dots\}}$</p> <p><i>their</i> 495 from attempt at a correct M1 expression</p>

Question		Answer	Marks	Part marks and guidance	
4		4 and 25 nfw	4	<p>B3 $\frac{10a^4 \times a^8}{25a^5} = \frac{2a^7}{5}$</p> <p>OR</p> <p>B2 for $k = 4$</p> <p>or</p> <p>M1 any correct simplification of $\frac{a^k \times a^8}{a^5} = a^7$</p> <p>eg</p> <p>$[a^k \times] a^3 [= a^7]$ or $[a^k \times a^8 =] a^{12}$</p> <p>$a^k = a^4$</p> <p>$\frac{a^{k+8}}{[a^5]} [= a^7]$</p> <p>$k + 8 - 5 = 7$ oe</p> <p>and</p> <p>B2 for $m = 25$</p> <p>or</p> <p>M1 for $\frac{10}{m} = \frac{2}{5}$ oe</p>	<p>Otherwise, condone embedded answers for M marks only</p> <p>M1 applying correctly a law of indices</p> <p>May be seen within an attempt to simplify with other coefficients.</p> <p>Allow $[m] = 10 \times 5 \div 2$</p>
5		Yes SSS Yes ASA No	3	<p>B2 for two correct rows</p> <p>or</p> <p>B1 for one correct row</p>	<p>Accept ticks and crosses</p> <p>For "No" ignore reason</p>
6	(a)	425	2	M1 for $680 \div 1.6[0]$ oe	e.g. $[0].68[0] \div [0].0016$
	(b)	1600 or 1.6×10^3	1		

Question		Answer	Marks	Part marks and guidance										
7	(a)	$x^2 + [1]x - 20$ final answer	2	<p>M1 for at least three of x^2, $[+]5x$, $-4x$, -20</p>	<p>M1 may be seen in a table e.g.</p> <table border="1"> <tr> <td></td> <td>x</td> <td>$--4$</td> </tr> <tr> <td>x</td> <td>x^2</td> <td>$-4x$</td> </tr> <tr> <td>$[+]5$</td> <td>$[+]5x$</td> <td>-20</td> </tr> </table> <p>$[1]x$ counts as two terms M1 for for $x^2 + [1]x + -20$</p> <p>Do not accept poor algebra e.g. $x5$ for $5x$ or $x \times x$ for x^2</p>		x	$--4$	x	x^2	$-4x$	$[+]5$	$[+]5x$	-20
		x			$--4$									
x	x^2	$-4x$												
$[+]5$	$[+]5x$	-20												
(b)	$(x - 5)(x + 5)$ final answer	1	Condone missing final bracket											
8	(a)	1852 1945	3	<p>B2 for 1852 or 1945 or for 1852.2 with either 1944.[6] or 1944.8[1] or</p> <p>M1 for $1764 \times \frac{5}{100} + 1764$ oe soi 1852.2</p>	<p>e.g. 1764×1.05 e.g. 1600×1.05^3 NC% methods M0 for just labels eg 10% = then 5% = M1 for $1764 \div 10 = [x]$. $[x] \div 2 = [y]$, $[y] + 1764$</p>									

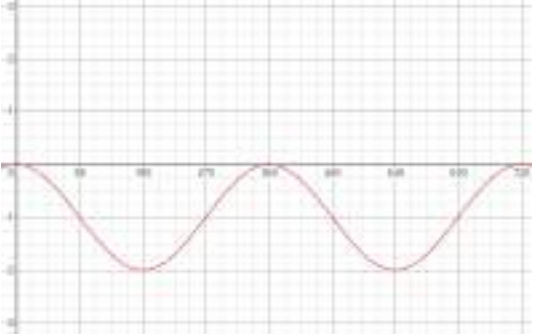
Question		Answer	Marks	Part marks and guidance	
	(b)	Correct curved graph	3	B2 for 5 of <i>their</i> points plotted correctly or B1 for 4 of <i>their</i> points plotted correctly or 5 of <i>their</i> points plotted at correct height but incorrect time	½ square accuracy <u>Stick graph</u> mark heights as points max B2 If stick graph and curve regard as choice and mark points/heights only <u>Bar chart</u> If points clearly marked, mark the points If points not clear B0 Ruled line or line segments max B2
	(c)	Increases [to 2000] Flattens/levels off/plateaus/horizontal [at 2000]	1 1		See Appendix 2000/the maximum must be seen once for 2 marks Accept approx./about 2000 Condone embellishments such as “slight fall” after correct statement or reference to line of best fit

Question	Answer	Marks	Part marks and guidance
9	25[%] with correct working	5	<p> B2 for 12 600 or M1 for $18\ 000 \times \frac{70}{100}$ oe or for $18\ 000 \times \frac{30}{100}$ AND M2 for $\frac{\text{their } 12600 - 9450}{\text{their } 12600} [\times 100]$ oe or M1 for $\frac{9450}{\text{their } 12\ 600} [\times 100]$ oe If 0 or M1 scored, instead award SC2 for answer 25[%] with no or insufficient working If 0 scored, instead award SC1 for 0.25 or 0.75 or 75[%] with no or insufficient working </p> <p> "correct working" requires at least M2 or M1M1 with the first M1 implied by B2 M0 for e.g. 70% of 18 000 M0 for e.g. 70% \times 18 000 Accept 3150 for numerator M2 may be seen as $\left(1 - \text{their } \frac{9450}{\text{their } 12600}\right) [\times 100]$ M1 may be seen as $\frac{9450}{18000} = 0.525$ and then followed by $\frac{0.525}{0.7}$ <u>Trials for second M marks</u> M2 for $12600 \times 0.25 = 3150$ or M1 for $12600 \times 0.75 = 9450$ <u>Equation method</u> B2M2 or B2M2 for $p/100 \times 12600 = 3150$ leading to $p = 25$ (scores 5 marks) B2M1 for $p/100 \times 12600 = 9450$ leading to $p = 75$ B2M1 for $18000 \times 0.7 \times m = 9450$ leading to $m = 0.75$, as 12600 implied within this </p>

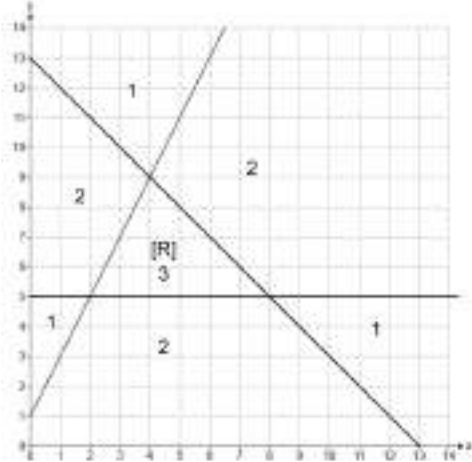
Question	Answer	Marks	Part marks and guidance
10	864 with correct working	6	<p>"correct working" requires at least M1M1</p> <p>Accept e.g. $12 \times 8 \times 18$ or 96×18</p> <p>M1 for $\frac{12 \times 16}{2} \times 18$ A1 for 1728</p> <p>or</p> <p>M1 for $\frac{12 \times 16}{2}$</p> <p>AND</p> <p>M1 for $\sqrt[3]{\text{their } 1728}$ A1 for 12</p> <p>AND</p> <p>M1 for $6 \times (\text{their } 12)^2$</p> <p>If 0, 1 or 2 scored, instead award SC3 for 864 as final answer with no working or insufficient working</p> <p>If 0 or M1 scored, instead award SC2 for 12 seen as dimension of cube or $(\sqrt[3]{3456})^2 \times 6$ soi 1371 to 1372 with no working or insufficient working</p> <p>If 0 scored, award SC1 for 1728 or $\sqrt[3]{3456}$ soi 15.1[...] with no working or insufficient working</p> <p>Allow $12^3 = 1728$ for M1A1 <i>Their</i> 1728 must be from correct method for volume of triangular prism</p> <p><i>Their</i> 12 must come from use of volume of triangular prism and cube root</p>

Question			Answer	Marks	Part marks and guidance
11			107.95 with correct working	6	<p>“correct working” requires at least M1ANDM1 or M2</p> <p>If working in pence:</p> <ul style="list-style-type: none"> • Allow up to 5 part marks for consistent working • Allow full marks if answer is clearly stated as 10795 p[ence] <p>M1 for $2a$ or $a + 5$ or $4a + 5$ or $25.4[0] + 5x$ seen</p> <p>M1 for $a + 2a + a + 5 = 85$ or better or for a trial correctly evaluated</p> <p>A1 for $[a =] 20$ [hours]</p> <p>AND</p> <p>M2 for $\frac{25.4[0]}{\text{their } 20} \times 85$ or 1.27×85 oe or $25.4[0] + 50.8[0] + \frac{25.4[0]}{\text{their } 20} \times \text{their } 25$ oe or $25.4[0] + 1.27 \times 40 + 1.27 \times 25$ oe or</p> <p>M1 for $\frac{25.4[0]}{\text{their } 20}$ implied by 1.27 or $\frac{25.4[0]}{4}$ implied by 6.35</p> <p>If 0 or 1 scored, instead award SC2 for 107.95 with no or insufficient working</p> <p>If 0 scored, instead award SC1 for 20 [hours] with no or insufficient working</p> <p>M1 implied by sub into $a + 2a + a [+ 5]$ with evaluation</p> <p>B1 max possible for using $5a$ instead of $a + 5$</p> <p>e.g. M2 for $\frac{25.4[0]}{4} \times 17$</p> <p>Method marks may be earned in stages</p> <p>May see equivalent algebraic methods. See Appendix. Non-algebraic methods may earn up to full marks.</p>

Question		Answer	Marks	Part marks and guidance	
12		0.3 oe nfw	4	<p>M3 for $0.4^2 + 0.3^2 + 0.2^2 + 0.1^2$ oe or M2 for 0.4^2 oe and 0.3^2 oe and 0.2^2 oe and 0.1^2 oe or M1 for 0.4^2 oe or 0.3^2 oe or 0.2^2 oe or 0.1^2 oe</p>	<p>M2 for correct method spoilt e.g. $\frac{(0.4^2 + 0.3^2 + 0.2^2 + 0.1^2)}{4}$</p> <p>Likely equivalents: $0.4^2 = 0.16$ or $\frac{4}{25}$ or 16% $0.3^2 = 0.09$ or $\frac{9}{100}$ or 9% $0.2^2 = 0.04$ or $\frac{1}{25}$ or 4% $0.1^2 = 0.01$ or $\frac{1}{100}$ or 1%</p>
13		716 636 160 with correct working	4	<p>B1 for 90 or 9×10</p> <p>AND</p> <p>M2 for $24 \times 24 \times$ <i>their</i> $90 \times 24 \times 24 \times 24$ oe or M1 for 24×24 [$\times \dots$] or $24 \times$ <i>their</i> 90 [$\times \dots$] or for 24,24,9,10,24,24,24 in any order</p> <p>If 0 or 1 scored, instead award SC2 for 716 636 160 with no working</p> <p>If 0 scored, instead award SC1 for $26 \times 26 \times$ <i>their</i> $90 \times 26 \times 26 \times 26$</p>	<p>“correct working” requires at least M1</p> <p>Allow 9×10 or 89 for <i>their</i> 90</p> <p>eg M1 for $24 \times 5 \times$ <i>their</i> 90 or for $24 \times 23 \times$ <i>their</i> $90 \times 22 \times 21 \times 20$ Accept list, summed, or on diagram</p>

Question		Answer	Marks	Part marks and guidance		
14			3	<p>B1 for general shape of cosine curve</p> <p>B1 for max at $y = 0$, minimum at $y = -2$</p> <p>B1 for max at $x = 360, 720$</p>	<p>Starting at its max and completing at least one full cycle; condone incorrect period</p> <p>For full marks, it must be a curve and have correct curvature</p> <p>Only these two max between $0 < x \leq 720$</p>	
15	(a)	20, 44, 69, 76, 80	2	M1 for cf calculated with one arithmetic error	Allow 80 or <i>their</i> 80 FT	
	(b)	<p>Plots at right-hand end of intervals</p> <p>Plots at correct heights</p> <p>Join with smooth curve or straight line segments</p>	<p>1</p> <p>1</p> <p>1</p>	<p>Tol $\frac{1}{2}$ square; FT if M1 in (a)</p> <p>Tol $\frac{1}{2}$ square; FT <i>their</i> ascending plots only</p> <p>Condone curve or absence of curve below $t = 25$</p>	<p>Plots of frequencies scores 0 across the whole of (b)</p> <p>0 for bars at correct heights since must miss off one end; if cf graph as well as bars, ignore bars</p>	
	(c)	(i)	<p>For 2 marks must say right/correct/true not yes</p> <p>Sight of 20 or 60</p> <p>$20/80 = \frac{1}{4}$ or $\frac{1}{4}$ of 80 = 20</p> <p>$60/80 = \frac{3}{4}$ or $\frac{3}{4}$ of 80 = 60</p>	<p>1</p> <p>1</p>	<p>Must be separate from the fraction comment. Do not accept more than/less than 60/20.</p>	<p>See Appendix</p> <p>Accept equivalent in words</p>
		(ii)	wrong/incorrect/false and correct reason	1	e.g. cannot be sure as exact data not given; it could be anywhere between 45 and 50 etc	

Question		Answer	Marks	Part marks and guidance	
16	(a)	<p>E.g. $[y=]-(x+3)(x-5)$</p> <p>AND</p> <p>either $[y = -x^2 - 3x + 5x] + 15$ or [Constant/y-intercept =] $-3 \times -5 = 15$</p> <p><u>Alternative method using simultaneous equations</u> $y = -x^2 + bx + c$</p> $0 = -(-3)^2 - 3b + c$ and $0 = -5^2 + 5b + c$ <p>[b = 2] c = 15</p>	3	<p>M2 for $[y=]-(x+3)(x-5)$</p> <p>or</p> <p>M1 for $k(x+3)(x-5)$</p> <p>M2 for $0 = -(-3)^2 - 3b + c$ and $0 = -5^2 + 5b + c$ or M1 for $y = -x^2 + bx + c$ or for $0 = (-3)^2 - 3b + c$ and $0 = 5^2 + 5b + c$</p>	<p>See Appendix For full marks, all shown parts of their expansion must be correct</p> <p>Accept k implied as 1</p>
	(b)	<p>The equation could be a multiple E.g. $[y=]-k(x+3)(x-5)$</p> <p>So the intercept could be a multiple of 15</p>	2	<p>B1 for Giving an example in the form $-k(x+3)(x-5)$ (where $k > 0$, $k \neq 1$, k need not be an integer)</p> <p>or stating that the intercept could be a multiple of 15</p>	<p>Allow full or part marks for a fully correct algebraic example E.g. $[y=]-2(x+3)(x-5)$ would have a y-intercept of 30</p>
17	(a)	6 is not a prime number oe	1		
	(b)	$2^{12} \times 3^5 \times 5^6$	2	M1 for $[6^5 =] 2^5 \times 3^5$ seen, expanded or used or for answer including 2^{12} or 3^5	Correct answer in expanded form implies $2^5 \times 3^5$ used for M1
	(c)	20 000	2	B1 for $2^5 \times 5^4$	

Question		Answer	Marks	Part marks and guidance	
18		<p>E.g. Correct inequalities shown on diagram, correct region R identified and correct area calculation $\frac{1}{2} \times 6 \times 4 [= 12]$</p> 	6	<p>B1 for line $y = 5$ B1 for line $x + y = 13$</p> <p>AND</p> <p>B1 for correct side of $y = 2x + 1$ B1 for correct side of $y = 5$ B1 for correct side of $x + y = 13$</p> <p>AND</p> <p>M1dep for $\frac{1}{2} \times 6 \times 4 [= 12]$ oe</p>	<p>Condone good freehand lines, which can be dashed or solid. Lines need only be one square long for line mark but they must be fit for purpose to define their region Mark the region which is labelled, but if no labelling mark the single region which is shaded (or unshaded) or implied by area calculation of correct region R</p> <p>Use diagram for these three marks</p> <p>If extra lines, mark those bounding R. If no R, mark poorest two</p> <p>Dep on region R being correct Accept counting squares but check areas bounding $y = 2x + 1$ Accept split into two triangles 4 and 8 oe</p>

Question		Answer	Marks	Part marks and guidance	
19	(a)	$(x - 4)^2 - 7$ final answer	3	<p>B1 for $(x - 4)^2$</p> <p>AND</p> <p>B2FT for -7 or</p> <p>M1 for $9 - (\text{their } -4)^2$ oe shown</p> <p>If 0 or 1 scored, allow</p> <p>SC2 for final answer $(x - 4) - 7$</p>	<p>No FT from $(x - 3)^2$ FT can be implied, check $9 - (\text{their } -4)^2$</p>
	(b)	$4 + \sqrt{7}$ $4 - \sqrt{7}$ final answer with working from (a)	2FT	<p>M1 for <i>their</i> $(x - 4)^2 = \text{their } 7$</p> <p>FT from <i>their</i> (a) for solutions in exact form if working shown</p>	<p>Answers only score 0</p> <p>Do not FT where $b = 0$ e.g. $(x - 4)^2$ If their b is a perfect square, allow FT for $a + \sqrt{b}$ and $a - \sqrt{b}$ or simplified as two integers If $b < 0$, a max of M1</p>

Question			Answer	Marks	Part marks and guidance	
20			125 with correct working	4	<p>M3 for $[8 \times] \left(\sqrt{\frac{75}{12}}\right)^3$ or 2.5^3 oe</p> <p>or</p> <p>M2 for $\sqrt{\frac{75}{12}}$ or $\sqrt{6.25}$ oe implied by 2.5 or $\frac{5}{2}$</p> <p>or</p> <p>M1 for $\frac{75}{12}$ oe implied by 6.25</p> <p><u>Alternative method:</u></p> <p>M3 for $[8 \div] \left(\sqrt{\frac{12}{75}}\right)^3$ or 0.4^3 oe</p> <p>or</p> <p>M2 for $\sqrt{\frac{12}{75}}$ or $\sqrt{0.16}$ oe implied by 0.4 or $\frac{2}{5}$</p> <p>or</p> <p>M1 for $\frac{12}{75}$ oe implied by 0.16</p> <p>If 0 scored, instead award SC1 for answer 125 with no or insufficient working</p>	<p>“correct working” requires evidence of at least M2</p> <p>Accept ratios M3 for 8 : 125 oe or M2 for 2 : 5 oe or M1 for 4 : 25 oe</p>

<p>21</p>		<p>2.8 to 2.81 with correct working</p>	<p>6</p>	<p>All methods: “correct working” requires at least M1ANDM1ANDM1</p> <p>First M1 may be on diagram or within other M marks</p> <p>M1 for $BAC = 180 - (32 + 43)$ or $58 + 47$ or 105</p> <p>AND</p> <p>M2 for $AC = \frac{7.5 \times \sin 32}{\sin(\text{their } 105)}$</p> <p>or</p> <p>M1 for $\frac{AC}{\sin 32} = \frac{7.5}{\sin(\text{their } 105)}$ oe</p> <p>AND</p> <p>A1 for $AC = 4.11[4\dots]$ or 4.115 (M1A1 implies M2A1)</p> <p>AND</p> <p>M1 for $\frac{AX}{\text{their } 4.11} = \sin 43$ or $\text{their } 4.11 \times \sin 43$ oe</p> <p>If 0, 1 or 2 scored, instead award SC3 for 2.8 to 2.81 with no or insufficient working.</p> <p>If 0 or 1 scored, instead award SC2 for $4.11[4\dots]$, 4.115 with no or insufficient working.</p>	<p>All methods: “correct working” requires at least M1ANDM1ANDM1</p> <p>First M1 may be on diagram or within other M marks</p> <p>M1 for $BAC = 180 - (32 + 43)$ or $58 + 47$ or 105</p> <p>AND</p> <p>M2 for $AB = \frac{7.5 \times \sin 43}{\sin(\text{their } 105)}$</p> <p>or</p> <p>M1 $\frac{AB}{\sin 43} = \frac{7.5}{\sin(\text{their } 105)}$ oe</p> <p>AND</p> <p>A1 for $AB = 5.29[5\dots]$ or $5.3[0]$ (M1A1 implies M2A1)</p> <p>AND</p> <p>M1 for $\frac{AX}{\text{their } 5.3[0]} = \sin 32$ or $\text{their } 5.3[0] \times \sin 32$ oe</p> <p>If 0, 1 or 2 scored, instead award SC3 for 2.8 to 2.81 with no or insufficient working.</p> <p>If 0 or 1 scored, instead award SC2 for $5.29[5\dots]$ or $5.3[0]$ with no or insufficient working.</p>
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				<p><u>Alternative Method splitting BC:</u> First M1 may be on diagram or within other M marks. Accept other terms for d. Do not accept numerical partition of BC.</p> <p>M1 for $BX = d$ and $XC = 7.5 - d$</p> <p>AND</p> <p>M2 for $d = \frac{7.5 \tan 43}{\tan 32 + \tan 43}$ oe or M1 for $d \tan 32 = (7.5 - d) \tan 43$ oe</p> <p>AND</p> <p>A1 for $d = 4.49$ to 4.5 (M1A1 implies M2A1)</p> <p>AND</p> <p>M1 for $\frac{AX}{\text{their } 4.49} = \tan 32$ or $\text{their } 4.49 \times \tan 32$ or for $\frac{AX}{(7.5 - \text{their } 4.49)} = \tan 43$ or $(7.5 - \text{their } 4.49) \times \tan 43$</p> <p>If 0, 1 or 2 scored, instead award SC3 for 2.8 to 2.81 with no or insufficient working. If 0 or 1 scored, instead award SC2 for 4.49[...] or 4.5[0] with no or insufficient working.</p> <p><u>Alternative Method using Areas</u> The main scheme still applies. The first four marks will be identical and the area</p>	<p>First M1 may be on diagram or within other M marks. Accept other terms for d. Do not accept numerical partition of BC.</p> <p>M1 $BX = 7.5 - d$ and $XC = d$</p> <p>AND</p> <p>M2 for $d = \frac{7.5 \tan 32}{\tan 43 + \tan 32}$ oe or M1 for $d \tan 43 = (7.5 - d) \tan 32$ oe</p> <p>AND</p> <p>A1 for $d = 3$ to 3.01 (M1A1 implies M2A1)</p> <p>AND</p> <p>M1 for $\frac{AX}{\text{their } 3.01} = \tan 43$ or $\text{their } 3.01 \times \tan 43$ or $\frac{AX}{(7.5 - \text{their } 3.01)} = \tan 32$ or $(7.5 - \text{their } 3.01) \times \tan 32$</p> <p>If 0, 1 or 2 scored, instead award SC3 for 2.8 to 2.81 with no or insufficient working. If 0 or 1 scored, instead award SC2 for 4.49[...] or 4.5[0] with no or insufficient working.</p>
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Question			Answer	Marks	Part marks and guidance
					method eventually simplifies to the final M1 expression. This is just a much more complex method.

APPENDIX

Non Calculator methods for percentages.

Labels only

This is when labels such as 10% = are used.

If only labels are used the final answer scores full marks if it is correct.

Condone a numerical slip if the answer is correct.

If there is an error in the values and so the final answer is incorrect this cannot score method marks

e.g. Find 65% of 80

Method scoring M1A1

10% = 8

5% = 4

50% = 40

65% = 52 ✓ M1A1

10% = 8

5% = 5

50% = 40

65% = 52 ✓ M1A1

condone this slip as answer correct

Method scoring M0A0

10% = 8

5% = 6 ✗

50% = 40

65% = 54 ✗ M0

Do not condone this slip as answer incorrect

Build up method

This is where the candidate finds the percentages to build up to the required value but shows the operations used.

e.g. Find 65% of 80

10% = $80 \div 10 = x$

5% = $x \div 2 = y$

50% = $x \times 5 = z$

65% = $x + z + y$

Because the operations have been shown and they are correct, if there is an error in one of x, y or z, method marks can still be earned