

INTERNATIONAL GCSE MATHEMATICS

9260/1E

Extension Tier Paper 1E

Mark scheme

November 2023

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2 3 B Y 9 2 6 0 / 1 E / M S

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Key to mark types and abbreviations

M	Method marks are awarded for a correct method which could lead to a correct answer.
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.
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.
M dep	A method mark dependent on a previous method mark being awarded.
B dep	A mark that can only be awarded if a previous independent mark has been awarded.
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.
[a, b)	Accept values $a \leq \text{value} < b$
3.14 ...	Accept answers which begin 3.14 eg 3.14, 3.142, 3.1416
Use of brackets	It is not necessary to see the bracketed work to award the marks.

Q	Answer	Mark	Comments
1(a)	3^{10}	B1	

Q	Answer	Mark	Comments
1(b)	5^{15}	B1	

Q	Answer	Mark	Comments
1(c)	11^{12}	B1	

Q	Answer	Mark	Comments
2(a)	$(0, -3)$	B1	

Q	Answer	Mark	Comments
2(b)	$x = 4$	B1	

Q	Answer	Mark	Comments
3	Might be true Definitely true Cannot be true	B3	B1 for each
	Additional Guidance		
	A tick and a cross in the same row – mark the tick		
	Allow any unambiguous indication		

Q	Answer	Mark	Comments
4	11^2 or 121 and 8^2 or 64 or 185	M1	implied by 57 or $\sqrt{57}$ or 7.5(4...) or 7.55
	$\sqrt{11^2 + 8^2}$ or $\sqrt{121 + 64}$ or $\sqrt{185}$	M1dep	
	13.6(...)	A1	accept 14 with M1 awarded
	Additional Guidance		
	Ignore incorrect rounding or truncation once correct answer seen		M1M1A1
	Answer 13.6(...) with no working		M1M1A1
	Answer 13.6(...) from trigonometry or accurate drawing only		M0M0A0

Q	Answer	Mark	Comments
5	Alternative method 1		
	$34 \div 2$ or 17	M1	implied by 119 or 51
	$(7 + 3 + 2) \times$ their 17 or $12 \times$ their 17	M1dep	oe eg $7 \times 17 + 3 \times 17 + 2 \times 17$ or $119 + 51 + 34$
	204 and Yes with M2 awarded	A1	
	Alternative method 2		
	$204 \div (7 + 3 + 2)$ or 17	M1	oe eg $204 \div 12$
	their 17×2	M1dep	
	34 and Yes with M2 awarded	A1	
	Alternative method 3		
	$(204 - 34) \div (7 + 3)$ or 17	M1	oe eg $170 \div 10$
	their 17×2	M1dep	
	34 and Yes with M2 awarded	A1	
	Additional Guidance		
	Yes may be implied if full method shown		
	12×34 with no other workings		M0
	$12 \times 34 \div 2$		at least M2

Q	Answer	Mark	Comments
6	$180 \div 3$ or 60	M1	may be seen on diagram implied by 120
	$180 - \frac{360}{5}$ or $180 - 72$ or $\frac{180 \times (5-2)}{5}$ or 108	M1	oe may be seen on diagram
	132	A1	may be seen on diagram

Q	Answer	Mark	Comments
7(a)	16 in right-hand section of Y	B1	
	13 in rectangle outside circles	B1ft	correct or ft 29 – their 16
	Additional Guidance		
	23 in right-hand Y and 6 in rectangle outside circles		B0B1ft

Q	Answer	Mark	Comments
7(b)	$24 + 7 + \text{their } 16 + \text{their } 13$ or $31 + 29$ or 60	M1	ft their completed diagram in (a)
	$\frac{31}{60}$ or 0.516... or 0.517 or 0.52 or 51.6...% or 51.7% or 52%	A1ft	oe fraction, decimal or percentage correct or ft their completed diagram in (a) if gives a probability > 0 and < 1
	Additional Guidance		
	ft must be to 2 sf or better		
	Ignore incorrect simplification or change of form once correct probability seen eg $\frac{31}{60}$ seen, answer 51%		M1A1

Q	Answer	Mark	Comments
8	$\frac{10}{16}$ or 0.625 or $\frac{16}{10}$ or 1.6 or $\frac{12}{16}$ or 0.75 or $\frac{16}{12}$ or 1.33...	M1	oe
	$\frac{10}{16} \times 12$ or $\frac{12}{16} \times 10$ or 7.5	M1dep	oe eg $12 \div \frac{16}{10}$
	2.5	A1	oe
	Additional Guidance		
	$10 \times 12 \div 16$		M1M1
	$7.5 : 10$ or $10 : 7.5$		M1M1
	$\frac{DX}{10} = \frac{12}{16}$ or $16 \times DX = 10 \times 12$		M1
	$DX : 10 = 12 : 16$ oe with no further relevant working		M0

Q	Answer	Mark	Comments
9(a)	Alternative method 1		
	$3k$ or $8k$	M1	oe
	$3k$ and $8k - 375$	M1dep	oe eg $3 + 3(k - 1)$ and $-367 + 8(k - 1)$
	$3k = 8k - 375$ or $5k = 375$	M1dep	oe equation
	75	A1	
	Alternative method 2		
	370 365 360 (355)	M1	sequence A – sequence B
	$-5k$	M1dep	
	$375 - 5k = 0$ or $5k = 375$	M1dep	oe equation
	75	A1	
	Alternative method 3		
	$-370 -365 -360 (-355)$	M1	sequence B – sequence A
	$5k$	M1dep	
	$5k - 375 = 0$ or $5k = 375$	M1dep	oe equation
	75	A1	
	Additional Guidance		
	Allow any letter for k		
	$k = 75$ in working followed by answer 225		M3A0

Q	Answer	Mark	Comments
9(b)	All Some Some None	B4	B1 for each
	Additional Guidance		
	A tick and a cross in the same row – mark the tick		
	Allow any unambiguous indication		

Q	Answer	Mark	Comments
10	$93\,925 \div 0.85$ or 110 500	M1	oe
	$(1 - 0.85) \times$ their 110 500 or their 110 500 – 93 925	M1dep	$93\,925 \times \frac{15}{85}$ is M2
	16 575	A1	

Q	Answer	Mark	Comments
11	Alternative method 1		
	$\cos (180 - 116) = \frac{x}{85}$ or $\cos 64 = \frac{x}{85}$	M1	any letter or AC for x oe eg $\sin (116 - 90) = \frac{x}{85}$ or $\sin 26 = \frac{x}{85}$ or $\frac{\sin 90}{85} = \frac{\sin 26}{x}$
	$85 \times \cos 64$	M1dep	oe eg $85 \times \sin 26$
	[37.2, 37.3]	A1	allow 37 unless coming from answer not in range [37.2, 37.3]
	Alternative method 2		
	$85^2 - (85 \times \sin (180 - 116))^2$ or $85^2 - (85 \times \sin 64)^2$ or [1388, 1388.423]	M1	oe eg $85^2 - (85 \times \cos (116 - 90))^2$ or $85^2 - (85 \times \cos 26)^2$
	$\sqrt{85^2 - (85 \times \sin 64)^2}$ or $\sqrt{[1388, 1388.423]}$	M1dep	oe eg $\sqrt{85^2 - (85 \times \cos 26)^2}$
	[37.2, 37.3]	A1	allow 37 unless coming from answer not in range [37.2, 37.3]

Q	Answer	Mark	Comments
12	$\pi \times (60 \div 2)^2 (\div 2)$ or $\pi \times 30^2 (\div 2)$ or 900π or 450π or [2826, 2828] or [1413, 1414]	M1	oe must be area of semicircle or large circle
	$\pi \times (60 \div 4)^2$ or $\pi \times 15^2$ or 225π or [706, 707]	M1	oe
	Yes and 225π and $450\pi - 225\pi = 225\pi$ or Yes and $225\pi \times 2 = 450\pi$	A1	oe working to show that shaded = unshaded or shaded = half total area allow use of consistent value in the range [3.14, 3.142] for π
	Additional Guidance		
	Condone semicircle being called unshaded area for up to M2 but must recover for A1		
	Omitting π completely		Zero
	π must be used correctly in the initial area calculations but then may be omitted consistently eg 450π and 225π seen, then Yes and $225 \times 2 = 450$		M1M1A1

Q	Answer	Mark	Comments
13(a)	$3x^3 - 12xy^2$	M1	allow terms seen in a grid
	$10y^2 + 14xy^2$	M1	allow terms seen in a grid
	$3x^3 + 2xy^2 + 10y^2$	A1	
	Additional Guidance		
	Allow eg $3 \times x^3 - 12 \times x \times y^2$ and $10 \times y^2 + 14 \times x \times y^2$ for M marks		
	xy^2 can be y^2x		
	Any further work after correct answer eg factorising is A0		

Q	Answer	Mark	Comments
13(b)	Alternative method 1		
	$2(8a - 5) = 7 \times 3a$ or $8a - 5 = \frac{7}{2} \times 3a$ or $\frac{2}{7}(8a - 5) = 3a$	M1	oe equation with no algebraic denominator or with a common denominator eg $16a - 10 = 21a$ or $\frac{16a - 10}{6a} = \frac{21a}{6a}$ or $8a - 5 = \frac{21}{2}a$ or $\frac{16}{7}a - \frac{10}{7} = 3a$
	$16a - 21a = 10$ or $8a - \frac{21}{2}a = 5$ or $\frac{16}{7}a - 3a = \frac{10}{7}$	M1dep	oe equation with terms collected eg $5a = -10$ a cannot be in denominator
	-2	A1	
	Alternative method 2		
	$\frac{5}{3a} = \frac{8}{3} - \frac{7}{2}$ or $\frac{5}{3a} = -\frac{5}{6}$	M1	oe equation with terms collected
	$\frac{3a}{5} = -\frac{6}{5}$ or $3a = -6$	M1dep	oe equation a cannot be in denominator
	-2	A1	

Q	Answer	Mark	Comments
14	Alternative method 1 – Works out children and adults on Tuesday		
	$104 \div (4 + 9)$ or 8	M1	oe implied by 32 or 72
	their 8×4 or 32 or their 8×9 or 72	M1dep	
	their $8 \times 4 + 16$ or 48 and their $8 \times 9 \times 1.5$ or 108	M1dep	oe
	48 and 108 and $4 : 9$	A1	oe eg $48 \div 12 = 4$ and $108 \div 12 = 9$
	Alternative method 2 – Works out extra adults		
	$104 \div (4 + 9)$ or 8	M1	oe implied by 32 or 72
	their 8×9 or 72	M1dep	
	their $8 \times 9 \times 0.5$ or 36	M1dep	oe eg $(\text{their } 8 \times 9 \times 1.5) - 72$
	16 and 36 and $4 : 9$	A1	oe
	Alternative method 3 – Works out percentage increase in children		
	$104 \div (4 + 9)$ or 8	M1	oe implied by 32 or 72
	their 8×4 or 32	M1dep	
	$16 \div \text{their } 32 \times 100 = 50\%$	M1dep	oe
	Both have increased by 50% with M3 seen	A1	oe

Q	Answer	Mark	Comments
15(a)	2	B1	

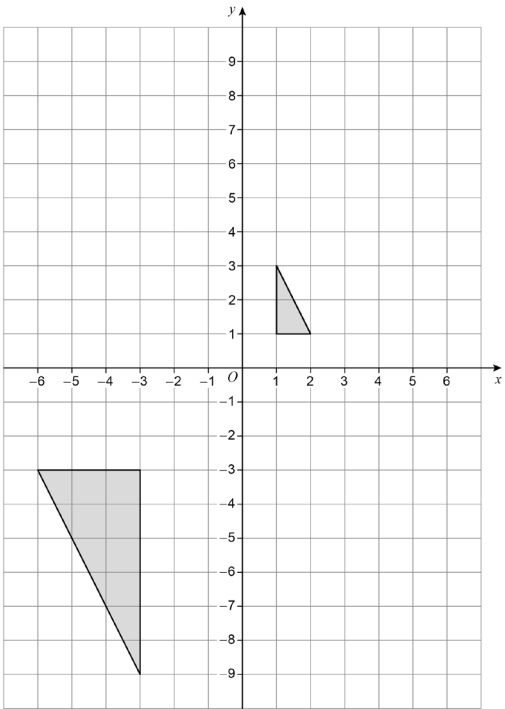
Q	Answer	Mark	Comments
15(b)	33 – 22 or 11	M1	cyclists' IQR
	19 or 27 or 8	M1	athletes' LQ or UQ or IQR $\pm \frac{1}{2}$ square for readings from the graph
	Ticks Yes and 11 and 8	A1	oe $\pm \frac{1}{2}$ square for readings from the graph
	Additional Guidance		
	Neither box ticked with yes implied in words can score 3 marks eg1 11 and 8 and athletes are more consistent eg2 11 and 8 and true		M1M1A1 M1M1A1

Q	Answer	Mark	Comments
16	$4(3x - 1)$	M1	
	$(3x - 1)(x - 2)$	M1	
	$\frac{4}{x-2}$	A1	
	Additional Guidance		
	$\frac{4}{x-2}$ followed by further work eg $\frac{2}{x-1}$		M2A0
	Condone multiplication signs for M marks		
	Condone missing final bracket for M marks		

Q	Answer	Mark	Comments
17	Alternative method 1		
	Angle $ADB = 76$ or angle $ACB = 76$	M1	may be seen on diagram
	Angle $AED = 50$ or angle $BEC = 50$	M1	may be seen on diagram
	54	A1	
	Alternative method 2		
	Angle $ADB = 76$ or angle $ACB = 76$	M1	may be seen on diagram
	Angle $x = 130 - 76$ or angle $CBD = 130 - 76$	M1dep	
	54	A1	
	Alternative method 3		
	Angle $ADB = 76$ or angle $ACB = 76$	M1	may be seen on diagram
	$2(180 - 76 - x) + 130 + 130 = 360$	M1 dep	oe equation
	54	A1	
	Additional Guidance		
	Ignore any reasons given		

Q	Answer	Mark	Comments
18(a)	Alternative method 1		
	$y = \frac{k}{\sqrt{x}}$	M1	oe equation implied by $7.5 = \frac{k}{\sqrt{36}}$ oe
	$(k =) 7.5 \times \sqrt{36}$ or $(k =) 45$	M1dep	oe
	$y = \frac{45}{\sqrt{x}}$	A1	oe equation
	Alternative method 2		
	$cy = \frac{1}{\sqrt{x}}$	M1	oe equation implied by $7.5c = \frac{1}{\sqrt{36}}$ oe
	$(c =) \frac{1}{\sqrt{36}} \div 7.5$ or $(c =) \frac{1}{45}$	M1dep	oe
	$\frac{y}{45} = \frac{1}{\sqrt{x}}$	A1	oe equation
	Additional Guidance		
	Alt 1 $(k =) 45$ or $(k \propto) 45$ with no incorrect working		M1M1
	Condone use of $\propto$ instead of $=$ for up to M1M1A0		
	$y \propto \frac{1}{\sqrt{x}}$ is M0 unless recovered		
	NB An acceptable alternative equation of the form $y^2 = \frac{k}{x}$ would lead to $(k =) 2025$ and an answer of $y^2 = \frac{2025}{x}$ or $y = \frac{45}{\sqrt{x}}$		

Q	Answer	Mark	Comments
18(b)	Correct substitution of 625 into their equation linking y and x	M1	must be direct or inverse proportion
	1.8 or $\frac{9}{5}$ or $1\frac{4}{5}$	A1ft	oe correct or ft $\frac{\text{their } k}{25}$ or $\frac{1}{\text{their } c} \div 25$ correctly evaluated
	Additional Guidance		
	ft in decimal form must be to 1 dp or better		

Q	Answer	Mark	Comments	
19		B2	B1 triangle of correct size and orientation in an incorrect position in the correct quadrant or vertices correctly plotted but not joined or triangle of correct orientation with two vertices correct	
	Additional Guidance			
	Shading not required			

Q	Answer	Mark	Comments
20(a)	$\frac{1}{4\sqrt{ab}}$	B1	

Q	Answer	Mark	Comments
20(b)	$\sqrt{12} \sqrt{12} - \sqrt{12}\sqrt{18} - \sqrt{12}\sqrt{18} + \sqrt{18} \sqrt{18}$ or $12 - \sqrt{12}\sqrt{18} - \sqrt{12}\sqrt{18} + 18$ or $12 - 2\sqrt{12}\sqrt{18} + 18$ or $(\sqrt{12} =) 2\sqrt{3} \text{ and } (\sqrt{18} =) 3\sqrt{2}$	M1	allow $\sqrt{216}$ for $\sqrt{12}\sqrt{18}$ for M1 only
	$12 - 6\sqrt{2}\sqrt{3} - 6\sqrt{2}\sqrt{3} + 18$ or $12 - 12\sqrt{2}\sqrt{3} + 18$ or $12 - 2\sqrt{6}\sqrt{36} + 18$ or $12 - 6\sqrt{6} - 6\sqrt{6} + 18$ or $12 - 12\sqrt{6} + 18$	M1dep	allow 30 for $12 + 18$ in the first four calculations only allow eg $2 \times 2\sqrt{3} \times 3\sqrt{2}$ or $4\sqrt{3} \times 3\sqrt{2}$ for $12\sqrt{2}\sqrt{3}$ allow eg $-2 \times 6\sqrt{6}$ for $-6\sqrt{6} - 6\sqrt{6}$
	$30 - 12\sqrt{6}$ with M2 awarded	A1	
	Additional Guidance		
	$30 - 12\sqrt{6}$ with no working		Zero
	Allow eg $\sqrt{12 \times 18}$ for $\sqrt{12}\sqrt{18}$ and $\sqrt{6 \times 36}$ for $\sqrt{6}\sqrt{36}$		

Q	Answer	Mark	Comments
21(a)	1st counter $\frac{3}{8}$ and $\frac{5}{8}$ 2nd counter $\frac{2}{7}, \frac{5}{7}$ and $\frac{3}{7}, \frac{4}{7}$	B3	oe fraction, decimal or percentage B1 each pair of Red and Blue branches correct
	Additional Guidance		
	Decimals and percentages must be to 2 sf or better		
	<pre> graph LR Start(()) --- 3/8 Red1[Red] Start --- 5/8 Blue1[Blue] Red1 --- 2/7 Red2[Red] Red1 --- 5/7 Blue2[Blue] Blue1 --- 3/7 Red3[Red] Blue1 --- 4/7 Blue3[Blue] </pre>		B3

Q	Answer	Mark	Comments
21(b)	Alternative method 1		
	$\frac{3}{8} \times \frac{2}{7}$ or $\frac{6}{56}$ or $\frac{5}{8} \times \frac{4}{7}$ or $\frac{20}{56}$	M1	oe ft their probabilities if between 0 and 1
	$\frac{3}{8} \times \frac{2}{7} + \frac{5}{8} \times \frac{4}{7}$ or $\frac{6}{56} + \frac{20}{56}$	M1dep	oe ft their probabilities if between 0 and 1
	$\frac{26}{56}$ or $\frac{13}{28}$	A1ft	oe fraction, decimal or percentage correct or ft their diagram if gives a probability > 0 and < 1
	Alternative method 2		
	$\frac{3}{8} \times \frac{5}{7}$ or $\frac{5}{8} \times \frac{3}{7}$ or $\frac{15}{56}$	M1	oe ft their probabilities if between 0 and 1
	$1 - \left(\frac{3}{8} \times \frac{5}{7} + \frac{5}{8} \times \frac{3}{7} \right)$ or $1 - \left(\frac{3}{8} \times \frac{5}{7} \right) \times 2$ or $1 - \left(\frac{15}{56} + \frac{15}{56} \right)$ or $1 - \left(\frac{30}{56} \right)$	M1dep	oe ft their probabilities if between 0 and 1
	$\frac{26}{56}$ or $\frac{13}{28}$	A1ft	oe fraction, decimal or percentage eg 0.46(...) correct or ft their diagram if gives a probability > 0 and < 1
	Additional Guidance		
	Ignore incorrect simplification or change of form once correct probability seen		
	Decimals and percentages must be to 2 sf or better		

Q	Answer	Mark	Comments
22	$-4a - 3b + 9a - b$ or $5a - 4b$ or $-9a + b + 4a + 3b$ or $-5a + 4b$	M1	oe may be on the diagram may be implied
	$\frac{k}{\text{their } -4} = \frac{15}{\text{their } 5}$ or $k : \text{their } -4 = 15 : \text{their } 5$ or $15 \times \text{their } -4 \div \text{their } 5$ or $(15a) - 12b$ or $3(5a - 4b)$	M1	oe ft their $5a - 4b$ must be of the form $na + mb$ but not $4a + 3b$ or $9a - b$
	-12	A1ft	correct or ft M0M1
	Additional Guidance		
	Answer $-12b$		M1M1A0
	$-4a - 3b + 9a - b = 5a - 2b$ with answer -6		M1M1A0
	$5a + 2b$, answer 6		M0M1A1ft
	$5a + 2b$, answer -6		M0M0A0ft

Q	Answer	Mark	Comments
23	Tangent drawn at (7, 3) and [1.4, 1.9]	B2	B1 tangent drawn at (7, 3)
	Additional Guidance		
	No tangent drawn		B0

Q	Answer	Mark	Comments
24(a)	Alternative method 1		
	$y - 5 = 2x$ or $\frac{y-5}{2}$	M1	
	$\frac{x-5}{2}$	A1	oe
	Alternative method 2		
	$x - 5 = 2y$	M1	
	$\frac{x-5}{2}$	A1	oe
	Additional Guidance		
	Accept $f^{-1}(x) = \dots$ or $y = \dots$		

Q	Answer	Mark	Comments
24(b)	$2(x^2 - 14) + 5$ or $2x^2 - 23$	M1	oe
	$2x^2 - 28 + 5 = x^2 - 14$ or $2x^2 - 23 = x^2 - 14$ or $x^2 = 9$ or 3 or -3	M1dep	oe
	3 and -3	A1	
	Additional Guidance		
	Answer ($x =$) 3		M1M1A0

Q	Answer	Mark	Comments
25	Alternative method 1 – Finding the angle opposite the 26 cm side		
	$26^2 = 18^2 + 12^2 - 2 \times 18 \times 12 \cos \theta$ or $(\cos \theta =) \frac{18^2 + 12^2 - 26^2}{2 \times 18 \times 12}$ or $(\cos \theta =) -\frac{13}{27}$ or $(\cos \theta =) -0.48(1\dots)$	M1	oe any letter
	$\cos^{-1}(\text{their } -\frac{13}{27})$ or 118.78(...) or 118.8 or 119 or $\cos(180 - \theta) = \frac{13}{27}$ or $\cos(180 - \theta) = -(\text{their } -\frac{13}{27})$	M1dep	oe
	$18^2 + 12^2 - 2 \times 18 \times 12 \cos(180 - \text{their } 118.78)$ or $18^2 + 12^2 - 2 \times 18 \times 12 \times \text{their } \frac{13}{27}$ or [258.56, 260.15]	M1dep	oe their 118.78 is their $\cos^{-1}(\text{their } -\frac{13}{27})$
	$\sqrt{260}$ or $2\sqrt{65}$ or [16, 16.142]	A1	

Mark scheme and Additional Guidance continue on the next page

25 cont	Alternative method 2 – Finding the angle opposite the 12 cm side		
	$12^2 = 26^2 + 18^2 - 2 \times 26 \times 18 \cos \theta$ or $(\cos \theta =) \frac{26^2 + 18^2 - 12^2}{2 \times 26 \times 18}$ or $(\cos \theta =) \frac{107}{117}$ or $(\cos \theta =) 0.91(4\dots)$ or 0.915	M1	oe any letter
	$\cos^{-1}(\text{their } \frac{107}{117})$ or 23.86(...) or 23.9	M1dep	oe
	$18^2 + 13^2 - 2 \times 18 \times 13 \cos(\text{their } 23.86)$ or [64, 65.14]	M1dep	oe
	$\sqrt{260}$ or $2\sqrt{65}$ or [16, 16.142]	A1	
	Alternative method 3 – Finding the angle opposite the 18 cm side		
	$18^2 = 26^2 + 12^2 - 2 \times 26 \times 12 \cos \theta$ or $(\cos \theta =) \frac{26^2 + 12^2 - 18^2}{2 \times 26 \times 12}$ or $(\cos \theta =) \frac{31}{39}$ or $(\cos \theta =) 0.79(4\dots)$ or 0.795	M1	oe any letter
	$\cos^{-1}(\text{their } \frac{31}{39})$ or [37.34, 37.4]	M1dep	oe
	$12^2 + 13^2 - 2 \times 12 \times 13 \cos(\text{their } 37.36)$ or [64, 65.14]	M1dep	oe
	$\sqrt{260}$ or $2\sqrt{65}$ or [16, 16.142]	A1	

Q	Answer	Mark	Comments
26	$1 + p + r = 2$ or $5^2 + 5p + r = 2$	M1	oe
	$1 + p + r = 2$ and $5^2 + 5p + r = 2$	M1dep	oe $1 + p + r = 5^2 + 5p + r$ is M2
	Correctly eliminates p or r eg $4p = -24$ or $4r = 28$	M1dep	oe dep on M2
	$(p =) -6$ and $(r =) 7$	A2	A1 $(p =) -6$ or $(r =) 7$
	Additional Guidance		
	The third method mark is for a correct elimination from two equations in both p and r provided M2 has been awarded and there has been at most one error in the rearrangement of the equations eg $1 + p + r = 2$ and $25 + 5p + r = 2$ $p + r = 1$ and $5p + r = 23$ $4p = 22$		M1M1 M1

Q	Answer	Mark	Comments
27	3.75 or 7.15	B1	
	$\frac{1}{2} \times \text{their } 3.75 \times \text{their } 7.15 \times \sin 35$	M1	$3.7 \leq \text{their } 3.75 < 3.8$ and $7.1 \leq \text{their } 7.15 < 7.2$
	[7.689, 7.7] with correct bounds used	A1	
	Additional Guidance		
	Accept workings in mm for B1 and M1 marks		