Question	Working	Answer	Mark	Notes
10	(54 – 24) ÷ 2 (=15) [may be marked on diagram]		5	M1
	$"15"^2-(24\div 2)^2 (=81)$			M1 ft their "15" (if > 12)
	[height =] $\sqrt{"15"^2-(24\div 2)^2} (=9)$			M1 ft their "15" (if > 12)
	$(24\times "9")\div 2$ oe			M1 figures must be from correct working
	Correct answer scores full marks (unless from obvious incorrect working)	108		A1 allow 107.9 – 108.1
	ALTERNATIVES BELOW			**Total 5 marks**
10	(54 – 24) ÷ 2 (=15) [may be marked on diagram]		5	M1
	or $x=\cos^{-1}\left(\frac{"12"}{"15"}\right)(=36.86...)$ **or** $y=\sin^{-1}\left(\frac{24\div 2}{"15"}\right)(=53.13...)$ **or** $A=\cos^{-1}\left(\frac{15^2+15^2-24^2}{2\times 15\times 15}\right)(=106.2...)$ **or** $B=\cos^{-1}\left(\frac{15^2+24^2-15^2}{2\times 15\times 24}\right)(=36.8....)$			M1 ft their "15" (if > 12) [using Hero's formula S = 0.5 × 54 (= 27) and] 27 × (27 – 24) × (27 – "15") × (27 – "15")
	or "12"tan"36.86…" (= 9) (allow 8.9… for these) "12" ÷ tan"53.13…" (= 9) **or** "15" × sin "36.86…" (= 9) **or** "15" × cos "53.13…" (= 9)			M1 ft their "15" (if > 12) M2 for 0.5 × 24 × "15" × sin"36.86…" or 0.5 × "15" × "15" × sin(2 × "53.13…") or $0.5\times "15"\times "15"\times \sin("106.2...")$ **or** $\sqrt{"27"("27"-24)("27"-"15")("27"-"15")}$
	$(24\times "9")\div 2$ oe			M1
	Correct answer scores full marks (unless from obvious incorrect working)	108		A1 allow 107.9 – 108.1
				Total 5 marks