22	$\sin\left(\frac{180-140}{2}\right)=\frac{MB}{8}$ oe or $\cos\left(\frac{140}{2}\right)=\frac{MB}{8}$ oe **or** $\frac{8}{\sin 20}=\frac{AC}{\sin 140}$ **and** $(MB^2)=8^2-\left(\frac{"15.035"}{2}\right)^2$ **or** $AC=\sqrt{8^2+8^2-2\times8\times8\times\cos140}$ (=15.035…) **and** $(MB^2)=8^2-\left(\frac{"15.035"}{2}\right)^2$		4	M1	for a correct expression with *MB* included, or an expression for MB^2 If using sine or cosine rule on the isosceles triangle *ABC*, use of Pythagoras required to obtain an expression for MB^2
	(*MB* =) 8sin(“20”) (= 2.736) or (*MB* =) 8cos(“70”) (= 2.736) or $(MB)=\sqrt{8^2-\left(\frac{"15.035"}{2}\right)^2}$			M1	
	$\tan TMB=\frac{10}{"2.736"}$			M1	dep 1st M1
		74.7		A1	74.65 to 74.75
					Total 4 marks
					TOTAL FOR PAPER 100 MARKS

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