11	eg $\cos(ACB)=\frac{15}{21}$ **or** $\sin(ACB)=\frac{\sqrt{21^2-15^2}}{21}$ oe **or** 44.4(153…) **or** $\tan(DCB)=\frac{9}{15}$ **or** $\sin(DCB)=\frac{9}{\sqrt{9^2+15^2}}$ oe **or** 30.9(637…) **or** $\tan(BDC)=\frac{15}{9}$ **or** $\sin(BDC)=\frac{15}{\sqrt{9^2+15^2}}$ oe **or** 59.0(362…) **or** $\sin(BAC)=\frac{15}{21}$ **or** 45.5(846…) **OR** $(AB=)\ \sqrt{21^2-15^2}$ $(=\sqrt{216}=6\sqrt{6}=14.6(969...))$ **or** $(DC=)\ \sqrt{15^2+9^2}$ $(=\sqrt{306}=3\sqrt{34}=17.4(928...))$		4	M1	for a correct trig statement for angle *ACB* **or** angle *DCB* **or** angle *BDC* **or** angle *BAC* **OR** for use of Pythagoras to find *AB* or *DC* Allow use of any letter to represent the angles or sides Calculations or values do not need to be linked to the correct side or angle
	eg $\cos(ACB)=\frac{15}{21}$ **or** $\sin(ACB)=\frac{\sqrt{21^2-15^2}}{21}$ oe **or** 44.4(153…) **and** $\tan(DCB)=\frac{9}{15}$ **or** $\sin(DCB)=\frac{9}{\sqrt{9^2+15^2}}$ oe **or** 30.9(637…) **OR** $\frac{\sin ACD}{"14.6..."-9}=\frac{\sin(180-"59.0")}{21}$ oe **or** $\frac{\sin ACD}{"14.6..."-9}=\frac{\sin"45.5(846...)}{"17.4(928...)"}$ oe **or** $("14.6..."-9)^2=21^2+"17.4"^2-2\times21\times"17.4"\times\cos ACD$ oe			M1	for a correct trig statement for angle *ACB* **and** angle *DCB* or angle *BAC* **and** angle *DCB* or angle *BAC* **and** angle *ADC* **OR** for a correct trig statement involving angle *ACD* Allow use of any letter to represent the angles or sides Calculations or values do not need to be linked to the correct side or angle
	eg "44.4(153…)" – "30.9(637…)" **OR** $\sin(ACD)=\frac{\sin(180-"59.0")}{21}\times("14.6..."-9)$ $(=0.232...)$ oe **or** $\cos(ACD)=\frac{21^2+"17.4"^2-("14.6..."-9)^2}{2\times21\times"17.4"}$ $(=0.972...)$ oe			M1	for a complete method **OR** for a correct trig statement for angle *ACD* Allow use of any letter to represent the angle
	Correct answer scores full marks (unless from obvious incorrect working)	13.5		A1	Answer in range 13.4 – 13.6
					Total 4 marks