

Q	Marking Instructions	AO	Marks	Typical Solution
9	Uses 'angle in a semicircle' to justify $\angle ACB = 90^\circ$	2.4	E1	Angle $\angle ACB = 90^\circ$ (Angle in a semicircle)
	Deduces that $AB^2 = AC^2 + BC^2$	2.2a	B1	$AB^2 = BC^2 + AC^2$ (Pythagoras)
	Applies area formula to one triangle	1.1a	M1	Area of $\triangle ABK = \frac{1}{2} AB^2 \sin 60^\circ$ Area of $\triangle BCL = \frac{1}{2} BC^2 \sin 60^\circ$ Area of $\triangle CAM = \frac{1}{2} AC^2 \sin 60^\circ$
	Applies area formula to all three triangles	1.1b	A1	
	Forms a correct equation involving $\triangle BCL + \triangle CAM$ and completes reasoned proof.	2.1	R1	$\begin{aligned} \triangle BCL + \triangle CAM &= \frac{1}{2} \sin 60^\circ (BC^2 + AC^2) \\ &= \frac{1}{2} \sin 60^\circ (AB^2) \\ &= \triangle ABK \end{aligned}$
	Total		5	