16	$(BC^2 =)\ 150^2 + 275^2 - (2 \times 150 \times 275 \times \cos 120)\ (= 139\,375)$		5	M1 for correct substitution into the cosine rule
	$(BC =)\ \sqrt{150^2 + 275^2 + 41250}$ oe or $\sqrt{139375}$ or $25\sqrt{223}$ or 373.…			M1 for correct order of operations and square root
	e.g. $\frac{\sin ABC}{275} = \frac{\sin 120}{"373..."}$ **or** $275^2 = 150^2 + "373..."^2 - (2 \times 150 \times "373..." \times \cos ABC)$ **or** $\cos ABC = \frac{150^2 + "373..."^2 - 275^2}{2 \times 150 \times "373..."}$ **or** $\frac{\sin ACB}{150} = \frac{\sin 120}{"373..."}$ **or** $150^2 = 275^2 + "373..."^2 - (2 \times 275 \times "373..." \times \cos ACB)$ **or** $\cos ACB = \frac{275^2 + "373..."^2 - 150^2}{2 \times 275 \times "373..."}$			M1 (dep on 1st M1) ft 373… for a correct trig statement involving angle *ABC* **or** angle *ACB*
	$(ABC =) \sin^{-1}\left(\frac{\sin 120}{"373..."} \times 275\right) (= 39.6\ldots)$ **or** $(ABC =) \cos^{-1}\left(\frac{150^2 + "373..."^2 - 275^2}{2 \times 150 \times "373..."}\right) (= 39.6\ldots)$ **or** $(ACB =) \sin^{-1}\left(\frac{\sin 120}{"373..."} \times 150\right) (= 20.3\ldots)$ **or** $(ACB =) \cos^{-1}\left(\frac{275^2 + "373..."^2 - 150^2}{2 \times 275 \times "373..."}\right) (= 20.3\ldots)$			M1 for a complete method to find angle *ABC* **or** angle *ACB*
		140		A1 accept 140 – 140.4
				Total 5 marks