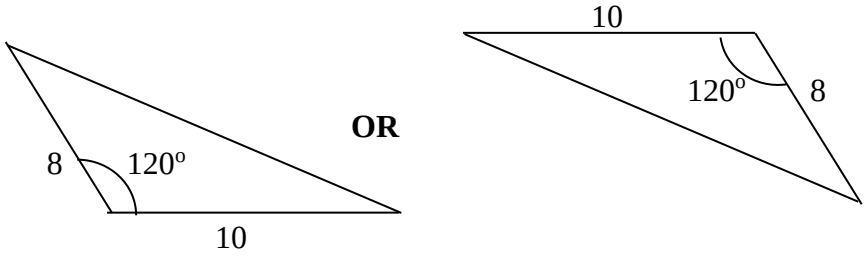
Question Number	Scheme	Marks
2.	 Correct triangle	M1
	$(F^2) = 8^2 + 10^2 - 2 \times 8 \times 10\cos\theta$ where $\theta < 180^o$	M1
	$(F^2) = 8^2 + 10^2 - 2 \times 8 \times 10\cos 120^o$	A1
	$F = \sqrt{244} = 2\sqrt{61}$ or 16 (N) or better (15.620499..)	A1 (4)
	OR:	
	$\pm(10 + 8\cos 60^o)$ **and** $\pm 8\sin 60^o$	M1
	Use of Pythagoras on their **combined** components	M1
	$F^2 = (10 + 8\cos 60^o)^2 + (8\sin 60^o)^2$	A1
	$F = \sqrt{244} = 2\sqrt{61}$ or 16 (N) or better (15.620499..)	A1 (4)
		(4)
	Notes	
2.	M1: **Correct** triangle with lengths and the angle (arrows not needed), seen or implied.	
	M1:Use of cosine rule with correct structure but any angle < 180°	
	A1: Correct expression with or without root	
	A1: cao	
	OR:	
	M1: Two **correct** components (allow inclusion of **i** and **j**)	
	M1:Use of Pythagoras using their combined **i** cpts and **j** cpts	
	A1: Correct expression with or without root	
	A1: cao	
	N.B. A scale drawing can score Max M1M0A0A0	