

Question			Answer	Marks	AO	Guidance	
2	(a)		$14(5\sin\theta) = 50$	M1*	1.1	Correct method for finding either the supplement of the required angle DAB (e.g. $2\left(\frac{1}{2}\times 5\times 14\times \sin\theta\right) = 50$)	Where θ is the supplement to the required angle DAB
			$\theta = \sin^{-1}\frac{5}{7} = 45.6$ or better or $\alpha = \cos^{-1}\frac{5}{7} = 44.4$ or better	M1dep*	1.1	or the angle (α) between DA and the vertical (e.g. $14(5\cos\alpha) = 50$) For either obtuse or acute angle	
			Angle $DAB = 134.4$	A1 [3]	1.1	awrt 134.4	134.4153086...
2	(b)		$(BD^2 =) 5^2 + 14^2 - 2(5)(14)\cos('134.4')$	M1	1.1	Correct application of cosine rule with their DAB or other complete method	Allow this mark even if angle DAB is acute
			$(BD =) 17.9$	A1 [2]	1.1	awrt 17.9	For ref: If using 1 d.p. from (a) then 17.8592516..., if using 'exact' value then should obtain 17.85999971...