11			**DR** In triangle BDC, $cos\ D = \frac{7^2+5^2-8^2}{2\times7\times5}$	**M1**	**3.1a**	Use of cosine rule in triangle BDC (for any angle)	**Or** $cos\ C = \frac{5^2+8^2-7^2}{2\times5\times8}$ **Or** $cos\ C = \frac{1}{2}$ **Or** $C = 60°$
			$cos\ D = \frac{1}{7}$	**A1**	**1.1**		
			$sin\ D = \sqrt{1-\frac{1}{49}}$				
			$sin\ D = \frac{\sqrt{48}}{7}$	**M1**	**1.1**	Approximate values must not be seen to earn **M1** i.e. must be exact	**Or** $sin\ C = \frac{\sqrt{3}}{2}$
			$\frac{AB}{sin\ D} = \frac{7}{sin\ 45°} \Rightarrow \frac{7AB}{\sqrt{48}} = \frac{7\times2}{\sqrt{2}}$	**M1**	**3.1a**	Use of sin rule in triangle ABD Exact values **must** be seen to earn **M1**	**Or** use of sin rule in triangle ABC $\frac{2AB}{\sqrt{3}} = \frac{8\times2}{\sqrt{2}}$
			$AB = 4\sqrt{6}$ [cm] oe	**A1**	**2.2a**	Must be exact answer	
				[5]			