	Question		Answer	Marks	AOs	Guidance	
1	**(i)**		$\dfrac{\sin x}{20} = \dfrac{\sin 45}{16}$	**M1***	**1.1a**	Use sine formula correctly in any form	**SC** B1 $\dfrac{\sin x}{16} = \dfrac{\sin 45}{20}$
			$\sin x = \dfrac{20\sin 45}{16} \left(= \dfrac{5\sqrt{2}}{8} \right)$	**A1**	**1.1**	Correct expression for $\sin x$ or 0.883…	
				Dep*M1	**1.1**	Correct work leading to a value for x – if previous A mark awarded then this mark is for getting to either 62.1 or 117.9	If the previous A mark was not awarded then award for evidence of using inverse sin on their value of $\sin x$
			62.1 and 117.9	**A1** **[4]**	**1.1**	Cao	
1	**(ii)**		$\dfrac{1}{2}(BC)(20)\sin(45) = 75\sqrt{2}$	**M1**	**1.1a**	Use $\dfrac{1}{2}ab\sin C$ correctly and equate to $75\sqrt{2}$	
			$(BC =)\ 15\ (\text{cm})$	**A1** **[2]**	**1.1**	Accept 15.0 from correct working	