Question	Answer	Marks	Guidance
6(a)	510	**3**	**M2** for a fully correct method e.g. [starts with 5, 7, 9 and ends in 3 or two of 5, 7, 9] $3 \times 6 \times 5 \times 3$ or 270 **and** [starts with 6, 8 and ends in 3,5,7, 9] $2 \times 6 \times 5 \times 4$ or 240 **OR** [ends with 3 and starts with 5, 6, 7, 8, 9] $5 \times 6 \times 5 \times 1$ or 150 **and** [ends with 5, 7, 9 and starts with 6, 8 or two of 5, 7, 9] $4 \times 6 \times 5 \times 3$ or 360 or **M1** for a partially correct method equivalent to one of the above two steps
6(b)	540	**3**	**M2** for a fully correct method e.g. [starts with 5, 7 and ends with 2, 3 and 5 or 7] $2 \times 6 \times 5 \times 3 = 180$ **and** [starts with 6, 8, 9 and ends with 2, 3, 5, 7] $3 \times 6 \times 5 \times 4 = 360$ OR [ends with 2, 3 and starts with 5, 6, 7, 8, 9] $5 \times 6 \times 5 \times 2$ or 300 **and** [ends with 5, 7 and starts with 6, 8, 9 and 5 or 7] $2 \times 6 \times 5 \times 4$ or 240 or **M1** for a partially correct method equivalent to one of the above two steps

Question	Answer	Marks	Guidance
7(a)	$\frac{\sin^2 x+(1-\cos x)^2}{(1-\cos x)\sin x}$ or $\frac{\sin^2 x}{(1-\cos x)\sin x}+\frac{(1-\cos x)^2}{(1-\cos x)\sin x}$	**M1**	
	$\frac{\sin^2 x+1-2\cos x+\cos^2 x}{(1-\cos x)\sin x}$	**A1**	OR $\frac{1-\cos^2 x+(1-\cos x)^2}{(1-\cos x)\sin x}$
	$\frac{1+1-2\cos x}{(1-\cos x)\sin x}$ or $\frac{1-\cos^2 x+1-2\cos x+\cos^2 x}{(1-\cos x)\sin x}$	**A1**	OR $\frac{(1-\cos x)(1+\cos x)+(1-\cos x)^2}{(1-\cos x)\sin x}$
	Fully correct justification of given answer: $\frac{2(1-\cos x)}{(1-\cos x)\sin x}=2\operatorname{cosec} x$ or $\frac{2-2\cos x}{(1-\cos x)\sin x}=\frac{2}{\sin x}=2\operatorname{cosec} x$ or equivalent	**A1**	All steps correct and final step justified OR $\frac{1+\cos x+1-\cos x}{\sin x}=2\operatorname{cosec} x$
	Alternative		
	$\frac{\sin x(1+\cos x)}{(1-\cos x)(1+\cos x)}+\frac{(1-\cos x)\sin x}{\sin x\sin x}$ or $\frac{\sin x(1+\cos x)}{1-\cos^2 x}+\frac{(1-\cos x)\sin x}{\sin^2 x}$	**(M1)**	
	$\frac{\sin x+\sin x\cos x}{\sin^2 x}+\frac{\sin x-\cos x\sin x}{\sin^2 x}$	**(A1)**	
	$\frac{2\sin x}{\sin^2 x}$	**(A1)**	
	Fully correct justification of given answer: $\frac{2}{\sin x}=2\operatorname{cosec} x$	**(A1)**	All steps correct and final step justified