Question	Answer	Marks	Partial Marks
6(a)(i)	$\frac{1}{8}$ or 0.125	**2**	**M1** for $64(0.5)^9$ oe
6(a)(ii)	$\frac{1023}{8}$ or 127.875	**2**	**M1** for $\frac{64(1-0.5^{10})}{1-0.5}$ oe
6(a)(iii)	128	**1**	
6(b)	$\frac{20}{2}\{2a+19d\}-400=2\times\frac{10}{2}\{2a+9d\}$ oe, soi	**M2**	**M1** for $\frac{20}{2}\{2a+19d\}$ or $\frac{10}{2}\{2a+9d\}$ soi
	$5a = a + 5d$ soi	**M1**	
	$d = 4$	**A1**	
	$a = 5$	**A1**	
	27 nfww	**B1**	must have earned all previous marks
7(a)	$\frac{\mathrm{d}}{\mathrm{d}x}(\cos^2 x)=-2\cos x\sin x$ soi	**B1**	
	Attempts the quotient rule $\frac{\mathrm{d}y}{\mathrm{d}x}=\frac{-2\cos x\sin x\tan x-(1+\cos^2 x)\sec^2 x}{\tan^2 x}$	**M1**	**FT** *their* $\frac{\mathrm{d}}{\mathrm{d}x}(\cos^2 x)$
	Fully correct isw	**A1**	**FT** *their* $\frac{\mathrm{d}}{\mathrm{d}x}(\cos^2 x)$ only
	$\frac{\delta y}{h}\approx \textit{their}\left.\frac{\mathrm{d}y}{\mathrm{d}x}\right\|_{x=\frac{\pi}{4}}$	**M1**	
	$\delta y \approx -4h$ cao	**A1**	