Question	Answer	Marks	Guidance
9(b)	$g^2(x) = \left(\left(x^{\frac{1}{2}} - 4\right)^{\frac{1}{2}} - 4\right)$	**M1**	For a correct order of operations
	$\left(\left(x^{\frac{1}{2}} - 4\right)^{\frac{1}{2}} - 4\right) = -2$ leading to $x^{\frac{1}{2}} = 8,$	**M1**	**Dep** on previous M mark for a correct attempt at a solution. Must deal with $x^{\frac{1}{2}}$ correctly to obtain the final solution
	$x = 64$	**A1**	
10(a)	Common difference = $4\sin 3x$ soi	**B1**	
	$390 = \frac{20}{2}\left(2\sin 3x + 19\left(4\sin 3x\right)\right)$	**M1**	**M1** for attempt at sum to 20 terms using *their* common difference, equating to 390 and attempt to solve to obtain $\sin 3x = ...$
	$\sin 3x = 0.5$	**A1**	
	$x = \frac{\pi}{18}, \frac{5\pi}{18}$	**3**	**M1** for a correct attempt to solve, may be implied by one correct solution, allow if not exact **A1** for 1 correct solution **A1** for a second correct solution and no others in the range
10(b)(i)	Common ratio = $0.5\cos y$	**B1**	
	$-0.5 < 0.5\cos y < 0.5$	**B1**	Correct use of $\left\lvert\text{common ratio}\right\rvert < 1$
10(b)(ii)	$9 = \frac{20\cos y}{1 - 0.5\cos y}$	**B1**	For attempt to use sum to infinity equation correctly and solve
	$\cos y = \frac{18}{49}$ or 0.367...	**2**	**M1** for solution of *their* equation, must have r as a multiple of $\cos y,$ to obtain $\cos y = ...$
	1.19	**A1**	