Question			Answer	Marks	AO	Guidance
2	(a)		$y = \sqrt{1+2x} \Rightarrow y^2 = 1+2x$	M1	1.1	Starting to work through inverse processes Allow equivalent processes e.g. swapping x and y at other stages
			$\left[f^{-1}(x) =\right] \frac{x^2-1}{2}$ oe	A1	1.1	
			The domain is $x \geq 0$	B1	2.2a	**B0** if $y \geq 0$
				[3]		
2	(b)		It is many-to-one **or** Is not one-to-one **or** It is one-to-many	E1	2.4	Could be via an example e.g. $x = 2$ and $x = -2$ give the same value of g(x) Give BOD for use of 'it' provided it does not contradict e.g. g(x) is one-to-many does not score isw after a correct answer
				[1]		

Q2a. Candidates may swap x and y at any stage, so you can allow the M1 for $x = \sqrt{(1+2y)}$ or $x^2 = 1 + 2y$.

The A1 is given for the correct answer or equivalent, so $\frac{x^2}{2} - \frac{1}{2}$ is alright. They do not need to write $f^{-1}(x)$ as it is given in the answer space (even if they do not put their answer there).

The B1 is given for giving the correct domain and may not be in the answer space allocated to it so allow it anywhere. But do not allow $y \geq 0$, $f^{-1}(x) \geq 0$ or $x > 0$

Q2b. We are allowing any of the three forms for the answer if using the word 'It'. 'It' could refer to the function g(x) or it's inverse $g^{-1}(x)$, so give B1 BOD if you see 'It is one-to-many'. But if the candidate specifically says 'g(x) is one-to-many' then that is incorrect and scores B0.