

Q	Marking instructions	AO	Marks	Typical solution
7(a)	Obtains $\frac{1}{\sqrt{10-2x}}$ ACF	1.1b	B1	$h(x) = \frac{1}{\sqrt{10-2x}}$
Subtotal			1	

Q	Marking instructions	AO	Marks	Typical solution
7(b)	Deduces $x < 5$ ACF Condone incorrect set notation	2.2a	B1	$x < 5$
Subtotal			1	

Q	Marking instructions	AO	Marks	Typical solution
7(c)	Forms the equation $y = \text{their } h(x)$ and squares both sides of the equation to remove the square root correctly. or Forms the equation $y = \text{their } h(x)$ and rearranges to obtain an expression for $\sqrt{10-2x}$ x and y can be switched at any point.	3.1a	M1	$y = \frac{1}{\sqrt{10-2x}}$ $\sqrt{10-2x} = \frac{1}{y}$ $10-2x = \frac{1}{y^2}$ $2x = 10 - \frac{1}{y^2}$ $x = 5 - \frac{1}{2y^2}$
	Obtains $10-2x = \frac{1}{y^2}$ or $5-x = \frac{1}{2y^2}$ x and y can be switched at any point.	1.1b	A1	$h^{-1}(x) = 5 - \frac{1}{2x^2}$
	Completes reasoned argument with no incorrect steps to show the given result. Must use correct notation $h^{-1}(x)$ and be consistent with use of variables. AG	2.1	R1	
Subtotal			3	

Question 7 Total			5	
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