Question			Answer	Marks	AO	Guidance	
5	(a)	(i)	$a = 2$	B1	1.1	Either stated or embedded in equation	eg $\|2x - b\|$ seen ignore any other values seen **B0** for $a = -2$, unless subsequently corrected
			$b = 6$	B1	1.1	Either stated or embedded in equation	eg $\|ax - 6\|$ seen ignore any other values seen
			$c = 1$	B1 [3]	1.1	Either stated or embedded in equation	eg $\|ax - b\| + 1$ seen ignore any other values seen
5	(a)	(ii)	Because f is a many to one function eg f(0) = f(6)	B1 [1]	1.2	Any correct reason	Condone no explicit example Could also say 'because f is not one to one' **B1** BOD for 'it is not one to one' If referring to 'one to many' or 'many to one' it must be clear whether this is f or f^{-1} (just 'it' or 'the function' is not enough) Allow implication of function eg 'as it is a many to one function there is no inverse function' May also refer to the 'horizontal line test', but need to state outcome eg horizontal line would cross graph of $y = f(x)$ twice

Question			Answer	Marks	AO	Guidance	
5	(b)	(i)	$y = px - q$ $px = y + q$ $x = \frac{1}{p}(y + q)$	**M1**	**3.1a**	Complete attempt to find inverse function of f(x) = $px - q$	Correct order of operations, allow sign error only Could use coordinate geometry and reflection in $y = x$ Allow **M1** BOD if more than one function is being considered
			$g^{-1}(x) = \frac{1}{p}x + \frac{q}{p}$	**A1**	**1.1**	Obtain correct inverse, in terms of x	Could be single term ie $g^{-1}(x) = \frac{x+q}{p}$ **A1** for just $\frac{1}{p}x + \frac{q}{p}$, ie $g^{-1}(x)$ can be omitted If LHS seen, it must be $g^{-1}(x)$ or y (allow BOD for g^{-1}, or using f not g) BOD if modulus sign included **A0** if additional equations given
			$x \geq 0$	**B1** **[3]**	**1.2**	Correct domain **B0** for $x > 0$	Independent of the first two marks If in words then must be correct, so **B1** for 'any non-negative x' but **B0** for 'any positive x' $g^{-1}(x) \geq 0$ is **B0** Condone incorrect set notation as long as intention is clear
5	(b)	(ii)	$0 < p \leq 1$	**B1**	**3.1a**	Correct set of values, any notation No need for $0 < p$ as specified in question, so **B1** for $p \leq 1$	**B0** for $p < 1$ **B0** for any additional incorrect values **B0** if just single example and not set of values Condone incorrect set notation as long as intention is clear

Question			Answer	Marks	AO	Guidance	
				[1]			