Question	Answer	Marks	Guidance
(a)	$\left\{\dfrac{(4x+2)^{-1}}{-1}\right\}\{\div 4\}$ or eg $\left\{\dfrac{1}{16}\right\}\{-(x+0.5)^{-1}\}$ or $\dfrac{-1}{(16x+8)}$	**B1 B1**	OE If more than one function of x present then B0 B0.
	$0-(-1/24)$	**M1**	Apply limits to an integral, ∞ must be used correctly.
	1/24	**A1**	Allow 0.0417 AWRT.
		4	
(b)	$\dfrac{dy}{dx}=\{-2(4x+2)^{-3}\}\ \ \{\times 4\}$	**B1 B1**	Allow unsimplified forms.
	Recognise $\dfrac{dy}{dx}=-1$	**B1**	SOI
	$their\ \dfrac{-8}{(4x+2)^3}=their-1$	**M1**	Must be numerical. Must be some attempt to solve *their* equation and $\dfrac{dy}{dx}\neq 0$.
	(0, ¼)	**A1 A1**	Accept $x = 0$, $y = ¼$. $y = ¼$ must be from $x = 0$ not $x = -1$.
		6	