Q	Marking instructions	AO	Marks	Typical solution
6(a)	Writes $\frac{1}{\sqrt{x}}$ term as $x^{-\frac{1}{2}}$ **PI** by $\sqrt{x}$ or $x^{\frac{1}{2}}$ in answer	1.1b	B1	$\int\left(6x^2-\frac{5}{\sqrt{x}}\right)dx=\int\left(6x^2-5x^{-\frac{1}{2}}\right)dx$ $=2x^3-10x^{\frac{1}{2}}+c$
	Obtains one correctly integrated term May be unsimplified	1.1a	M1	
	Obtains $2x^3-10x^{\frac{1}{2}}+c$ **ISW** Condone omission of $+c$ Must be simplified	1.1b	A1	
	Subtotal		**3**	

Q	Marking instructions	AO	Marks	Typical solution
6(b)	Substitutes $x=4$ into their integrated expression from part **6(a)**, with an arbitrary constant **and** sets equal to 90 **PI** by -18	3.1a	M1	$90=2\times4^3-10\times4^{\frac{1}{2}}+c$ $c=-18$ $\therefore y=2x^3-10x^{\frac{1}{2}}-18$
	Obtains $y=2x^3-10x^{\frac{1}{2}}-18$ **CAO** Condone f(x) for y	1.1b	A1	
	Subtotal		**2**	

	Question 6 Total		**5**	