- **5** (a) (i) Find $\int \left(3 x + \frac{1}{x^3}\right) dx$
 - (ii) Hence evaluate $\int_{1}^{2} \left(3 x + \frac{1}{x^{3}}\right) dx$

(4)

- (b) (i) Find $\int 6 \sin 3x \, dx$
 - (ii) Hence evaluate $\int_{\frac{\pi}{9}}^{\frac{\pi}{6}} 6 \sin 3x \, dx$

1		4	1
1	/	1	-1
	=	÷	- 1





Question 5 continued
(Total for Question 5 is 8 marks)

