Question	Answer	Marks	Guidance
(a)	Attempt to find x-value from $3\sin x - 3\sin 2x = 0$ using identity for $\sin 2x$	**M1**	
	Obtain at least $\cos x = \frac{1}{2}$	**A1**	
	Obtain $\frac{1}{3}\pi$	**A1**	**SC B3** can be spotted from $\sin x = \sin 2x$
		3	
(b)	Integrate to obtain form $k_1 \cos x + k_2 \cos 2x$	***M1**	non-zero constants k_1, k_2 M0 for $3\cos x \pm 6\cos 2x$
	Obtain correct $-3\cos x + \frac{3}{2}\cos 2x$	**A1**	
	Attempt value of integral using their lower limit (in radians) and π correctly	**DM1**	Allow one sign error
	Obtain $\frac{27}{4}$	**A1**	OE
		4	