

Q	Marking instructions	AO	Marks	Typical solution
4	Uses or states small angle approximation for $\tan 5x \approx 5x$	1.1b	B1	$\frac{x \tan 5x}{\cos 4x - 1} \approx \frac{x \times 5x}{1 - \frac{(4x)^2}{2} - 1}$ $\approx \frac{5x^2}{-8x^2}$ $\approx -\frac{5}{8}$
	Uses or states small angle approximation for $\cos 4x \approx 1 - \frac{(4x)^2}{2}$ Condone omission of bracket	1.1b	B1	
	Substitutes their expressions Of the form $\tan 5x \approx mx$ and $\cos 4x \approx 1 - \frac{nx^2}{2}$ into $\frac{x \tan 5x}{\cos 4x - 1}$ Condone correct extra terms	1.1b	M1	
	Deduces $A = -\frac{5}{8}$ from a reasoned argument CSO	2.2a	R1	
Total			4	