

Question			Answer	Marks	AO	Guidance
10	(a)		$8^{\frac{1}{3}}$ or 2 seen	B1	1.1	
			$1 + \left(\frac{1}{3}\right)\left(\frac{3x}{8}\right) + \left(\frac{1}{3}\right)\left(\frac{1}{3} - 1\right)\frac{\left(\frac{3x}{8}\right)^2}{2!} + \dots$	M1	1.1	two of the first three terms correct; ignore terms in $x^3$ and above; may be embedded; must see at least substitution for third term
			$\left(1 + \frac{x}{8} - \frac{x^2}{64} + \dots\right)$	A1	1.1	may be unsimplified; may be embedded
			$2 + \frac{x}{4} - \frac{x^2}{32}$ or $2\left(1 + \frac{x}{8} - \frac{x^2}{64} + \dots\right)$ <b>isw</b>	A1	1.1	all three terms correct; ignore extra terms
						if <b>M0</b> allow <b>SCB1</b> for $\left(1 + \frac{1}{2}x - \frac{1}{4}x^2\right)$ following the equivalent method with use of $\frac{3x}{2}$ ; may see eg $2 + x - \frac{1}{2}x^2$
						if <b>M0</b> allow <b>SCB2</b> for correct expansion not fully supported
						if <b>M1A0</b> allow <b>SCB1</b> for correct expansion not fully supported
				[4]		
10	(b)		$ x  < \frac{8}{3}$ <b>or</b> $-\frac{8}{3} < x < \frac{8}{3}$	B1FT	2.5	allow $ x  \leq \frac{8}{3}$ <b>or</b> $-\frac{8}{3} \leq x \leq \frac{8}{3}$ ; mark the final answer
						<b>FT</b> their $\left(1 + \frac{a}{b}x\right)$
				[1]		