

Question			Answer	Marks	AO	Guidance
1	(a)		$(1 + \frac{1}{2}(3x) + \dots$	M1	1.1	- Use of binomial expansion as far as $1 + \frac{1}{2}(3x)$ - soi by correct answer, nfw
			$\dots + \frac{\frac{1}{2}(\frac{1}{2}-1)}{2!}(3x)^2) \text{ oe}$	M1	1.1	- Full expansion up to quadratic term. - Condone e.g. $3x^2$ but not x^2 - soi by correct answer
			$1 + \frac{3x}{2} - \frac{9x^2}{8} \text{ oe}$	A1	1.1	- Allow exact decimals: $1 + 1.5x - 1.125x^2$ - Ignore cubic and higher order terms. - Mark final answer
				[3]		isw writing terms as a list after correct answer seen, but A0 if correct answer spoilt by further manipulation
1	(b)		Valid for $ x < \frac{1}{3}$	B1	1.1	- OR $-\frac{1}{3} < x < \frac{1}{3}$ OR $x < \frac{1}{3} \cap x > -\frac{1}{3}$ - Condone $x \leq \frac{1}{3}$ or $-\frac{1}{3} \leq x \leq \frac{1}{3}$ (as $n > 0$) - Must be x not e.g. $3x$ - Mark final answer
				[1]		