

Q	Marking Instructions	AO	Marks	Typical Solution
4(a)	Expands $(1 - 3x)^4$ showing a 1, a $(\pm 3x)$ term and a $(\pm 3x)^2$ term	AO1.1a	M1	$1 + 4(-3x) + 6(-3x)^2$
	Uses correct coefficients, 4 & 6 (PI by correct answer, ignore sign errors)	AO1.1b	A1	$1 - 12x + 54x^2$
	Obtains totally correct expansion Ignore extra terms	AO1.1b	A1	
(b)	Selects value to use for x and substitutes it in their expansion. Correct value, or solves $1 - 3x = 0.994$	AO2.2a	M1	Need $x = 0.002$ $1 - 12 \times 0.002 + 54 \times 0.002^2$
	Evaluates expression 0.976216 CAO for three terms or 0.976215 CAO for four or five terms used and shown	AO1.1b	A1	=0.976216
	Total		5	