

Question	Answer	Marks	Guidance
3(a)	$x^3 : \binom{5}{3} 3^2 (-ax)^3 [-10 \times 3^2 \times a^3]$ or $x^4 : \binom{5}{4} 3 (-ax)^4 [5 \times 3 \times a^4]$	M1	Allow for either term, allow sign error and combination notation.
	$x^3 : -90a^3$	A1	Allow in the full expansion.
	$x^4 : 15a^4$	A1	Allow in the full expansion.
		3	

Question	Answer	Marks	Guidance
3(b)	Coefficient of x^4 is $a \times their -90a^3 + 7 \times their 15a^4$ $\left[=15a^4 \right]$	M1	Must select two appropriate terms only.
	$15a^4 = 240$	DM1	Reducing to a simple quartic equation in a .
	$\Rightarrow a^4 = 16 \Rightarrow a = 2$	A1	A0 if $a = -2$ is given as a solution.
		3	