Question	Scheme	Marks	AOs
4	$\left(k+\frac{1}{2}x\right)^9$		
	Attempts correct coefficient ${}^9\mathrm{C}_6 k^6\left(\frac{1}{2}\right)^3$ or term ${}^9\mathrm{C}_6 k^6\left(\frac{1}{2}x\right)^3$	M1	1.1b
	Sets ${}^9\mathrm{C}_6 k^6\left(\frac{1}{2}\right)^3 = 70 \Rightarrow k =$ via the sixth root	dM1	2.1
	$k = 1.37$ only	A1	1.1b
		(3)	
			(3 marks)

Notes:

M1: Attempts the correct term or coefficient. Condone a missing bracket around the $\left(\frac{1}{2}x\right)$

Look for a minimum of

- a correct binomial coefficient in any form
- k^6
- $\left(\frac{1}{2}\right)^3$ or $\left(\frac{1}{2}x\right)^3$ but condone $\frac{1}{2}x^3$

dM1: Full and complete method to find a value for k via the sixth root.

A1: CSO $k = 1.37$ only. Note that this is not awrt