Q	Marking instructions	AO	Marks	Typical solution
8(a)	Obtains the correct constant term 32	1.1b	B1	$(2+kx)^5 = 32+80kx+80k^2x^2+...$
	Obtains $5\times16kx$ or $10\times8(kx)^2$ OE PI by $\frac{5k}{2}x$ or $\frac{5\times4}{2!}\left(\frac{kx}{2}\right)^2$	1.1a	M1	
	Obtains $32+80kx+80k^2x^2(+...)$ Accept list of correct terms. **No ISW** If more terms are given it must be obvious which are their first three terms.	1.1b	A1	
	Subtotal		**3**	

Q	Marking instructions	AO	Marks	Typical solution
8(b)	Forms the equation their $Ak = 4\times$their Bk^2 OE May recover if x is initially included.	3.1a	M1	$80k = 4\times80k^2$ $k = 0$ or $\frac{1}{4}$ $k = \frac{1}{4}$ Since $k > 0$
	Deduces $k = \frac{1}{4}$ only Or their $k =$ their $\frac{A}{4B}$ Justification of rejection k = 0 not required.	2.2a	A1F	
	Subtotal		**2**	

	Question 8 Total		**5**	