SL / Binomial theorem (2021)

[23 marks]

The values in the fourth row of Pascal's triangle are shown in the following table. 1a. Write down the values in the fifth row of Pascal's triangle. [2 marks]

Hence or otherwise, find the term in x^3 in the expansion of $(2x)$	$(+3)^{\circ}$.	[5 IIIalKS
Consider the expansion of $\left(x^2+rac{2}{x} ight)^{10}$.		
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		[1 mar
		[1 mari
Consider the expansion of $\left(x^2+rac{2}{x} ight)^{10}.$ Write down the number of terms of this expansion.		[1 mar

b. Find the coefficient of x^8 .	[5 marks
Consider the expansion of $(2x+3)^8$.	
a. Write down the number of terms in this expansion.	[1 mark
b. Find the term in x^3 .	[4 marks

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