

f91 Useful explanation of the  
 Motzkin sequences from Meally 2868 etc

	2 <sup>nd</sup> level	Sq	For n=4	(Circle) position	Sq	
A2866	Lists of lists	N1463	192 = 12(1+4+6+4+1)	N806	72	A2867
A262	Sets of lists	N1190	73 = 4 + 4(3 + 2(2) + 6) + 1	N673	36	A2868
A670	Lists of sets	N1191	75 = 1 + 7(2 + 6) + 4	N574	36	A2869
A110	Sets of sets	N585	15 = 1 + 7 + 6 + 1	N1077	7	A2870
A79	Lists of numbers	N432	16 = 1 + 4 + 6 + 4 + 1	<del>N101</del>	6	A1405
A41	Sets of numbers	N244	5 : 4, 3, 1, 2, 2, 1, 1	N101	2	A2569
	Sets of subsets of direct product					
	A1861	N653	94 = 2 + 7(4 + 6) + 16	N483	48	A2871
	A2872	N705	?	N1154	?	A2873
	A2874	N738	?	N498	?	A2875

if you have time please return this with  
 the last two items filled in (Sq 705, 738)  
 = Sq 1463 above. Would one expect 4 rather than 12?

increased level  
 $1465 \quad 26 = 1 + (6+4) + (3+12)$

Could one form a sequence of maximal terms  
 here also?  $u_4 = 15$

942.5 Acyclic hydrocarbons. I was expecting to  
 be able to exhibit this series as a total  
 of alkanes, alkenes, alkynes, but somehow  
 failed.

Victor Meally, Comparison of several sequences  
 given in Motzkin's paper "Sorting numbers for cylinders..."  
 letter to NJAS, no date.