

W. Lang, Nov 09 2007

A134278 tabf array: partition numbers $M_3(6) = M3(6)$.

Partitions of n listed in Abramowitz-Stegun order p. 831-2 (see the main page for an A-number with the reference).

n\k	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	...
1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	6	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	66	18	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	1056	264	108	36	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	22176	5280	3960	660	540	60	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	576576	133056	95040	43560	15840	23760	3240	1320	1620	90	1	0	0	0	0	0	0	0	0	0	0	0	0
7	17873856	4036032	2794176	2439360	465696	665280	304920	249480	36960	83160	22680	2310	3780	126	1	0	0	0	0	0	0	0	0
8	643458816	142990848	96864768	81962496	39029760	16144128	22353408	19514880	7983360	7318080	1241856	2661120	1219680	1995840	136080	73920	221760	90720	3696	7560	168	1	
.																							
.																							
n\k	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	...

The next two rows, for n=9 and n=10, are:

n=9: [26381811456, 5791129344, 3860752896, 3196537344, 2950649856, 643458816, 871782912, 737662464, 351267840, 301771008, 526901760, 80498880, 48432384, 100590336, 87816960, 71850240, 65862720, 17962560, 2794176, 7983360, 3659040, 8981280, 1224720, 133056, 498960, 272160, 5544, 13608, 216, 1].

n=10: [1213563326976, 263818114560, 173733880320, 141560939520, 127861493760, 61963646976, 28955646720, 38607528960, 31965373440, 29506498560, 13076743680, 22129873920, 10538035200, 9659865600, 2144862720, 4358914560, 3688312320, 1756339200, 3017710080, 5269017600, 804988800, 718502400, 987940800, 121080960, 335301120, 292723200, 359251200, 329313600, 179625600, 7348320, 5588352, 19958400, 9147600, 29937600, 6123600, 221760, 997920, 680400, 7920, 22680, 270, 1].

The first column gives $A008548(n) = (5^n - 4) \cdot 5 = [1, 6, 66, 1056, 22176, 576576, 17873856, 643458816, 26381811456, 1213563326976, \dots]$, (5-factorials).

The row sums give, for $n \geq 1$: $A049412 = [1, 7, 85, 1465, 32677, 894103, 28977817, 1085272945, 46112305897, 2191384887175, \dots]$. They coincide with the row sums of triangle A049385.

e.o.f.