

## Triangle in A317054

$k$	0	1	2	3	4	5	6	7	...
-----	---	---	---	---	---	---	---	---	-----

$n$	Row Sum								
	$\sigma_n$								
0	1	1							
1	1	1							
2	11	1	10						
3	21	1	20						
4	131	1	30	100					
5	341	1	40	300					
6	1651	1	50	600	1000				
7	5061	1	60	1000	4000				
8	21571	1	70	1500	10000	10000			
9	72181	1	80	2100	20000	50000			
10	287891	1	90	2800	35000	150000	100000		
11	1009701	1	100	3600	56000	350000	600000		
12	3888611	1	110	4500	84000	700000	2100000	1000000	
13	13985621	1	120	5500	120000	1260000	5600000	7000000	
14	52871731	1	130	6600	165000	2100000	12600000	28000000	10000000

⋮

The row sums give A015446 (Generalized Fibonacci numbers), and the limit of their ratio is

$$\lim_{n \rightarrow \infty} \left( \frac{\sigma_n}{\sigma_{n-1}} \right) \rightarrow 3.70156211871642\dots$$

**REFERENCE:**

Shara Lalo and Zagros Lalo, Polynomial Expansion Theorems and Number Triangles, Zana Publishing, 2018, ISBN: 978-1-9995914-0-3