

Chart of orders of growth

n	logarithmic growth	polynomial growth				exponential growth		factorial growth
	$\ln n$	$n^{0.1}$	$100n$	n^2	100^n	1.01^n	2^n	$n!$
1	0.00000	1.00000	100	1	1	1.01000	2	1
2	0.69315	1.07177	200	4	1.27e+30	1.02010	4	2
3	1.09861	1.11612	300	9	5.15e+47	1.03030	8	6
4	1.38629	1.14870	400	16	1.61e+60	1.04060	16	24
5	1.60944	1.17462	500	25	7.89e+69	1.05101	32	120
6	1.79176	1.19623	600	36	6.53e+77	1.06152	64	720
7	1.94591	1.21481	700	49	3.23e+84	1.07214	128	5040
8	2.07944	1.23114	800	64	2.04e+90	1.08286	256	40320
9	2.19722	1.24573	900	81	2.66e+95	1.09369	512	362880
10	2.30259	1.25893	1000	100	1.00e+100	1.10462	1024	3628800
20	2.99573	1.34928	2000	400	1.27e+130	1.22019	1048576	2.43e+18
50	3.91202	1.47876	5000	2500	7.89e+169	1.64463	1.13e+15	3.04e+64
100	4.60517	1.58489	10000	10000	1E+200	2.70481	1.27e+30	9.33e+157
1000	6.90776	1.99526	100000	1000000	1E+300	20959.16	1.07e+301	>1e+2567
10000	9.21034	2.51189	1000000	100000000	1e+500	1.64e+43	>1e+3010	>1e+35659
100000	11.51293	3.16228	10000000	1E+10	1e+600	>1e+432	>1e+30102	>1e+456573
1E+100	230.2585	1E+10	1E+102	1E+200	1e+10000	>1e(10^97)	>1e(10^99)	>1e(10^101)