

Growth Rates of Functions¹

lg n	\sqrt{n}	n	n log n	n^2	n^3	2^n
0	1	1	0	1	1	2
1	1.4	2	2	4	8	4
2	2	4	8	16	64	16
3	2.8	8	24	64	512	256
4	4	16	64	256	4096	65,536
5	5.7	32	160	1024	32,768	4.294×10^9
≈ 5.3	6.3	40	≈ 212	1600	64000	1.099×10^{12}
6	8	64	384	4096	262,144	1.844×10^{19}
~ 10	31.6	1000	9966	10^6	10^9	NaN =)

1. From Arup Guha's COP 3503 notes.