

COMPLEXITY \ TIME	1sec	10 ² sec (1.7 min)	10 ⁴ sec (2.7 hr)	10 ⁶ sec (12 DAYS)	10 ⁸ sec (3 YEARS)	10 ¹⁰ sec (3 CENT.)
1000n	10 ³	10 ⁵	10 ⁷	10 ⁹	10 ¹¹	10 ¹³
1000n lgn	1.4x10 ²	7.7x10 ³	5.2x10 ⁵	3.9x10 ⁷	3.1x10 ⁹	2.6x10 ¹¹
100n ²	10 ²	10 ³	10 ⁴	10 ⁵	10 ⁶	10 ⁷
10n ³	46	2.1x10 ²	10 ³	4.6x10 ³	2.1x10 ⁴	10 ⁵
n lgn	22	36	54	79	112	156
2 ^{n/3}	59	79	99	119	139	159
2 ⁿ	19	26	33	39	46	53
3 ⁿ	12	16	20	25	29	33

FIG. 1.2. *Maximum size of a solvable problem. A factor of ten increase in machine speed corresponds to a factor of ten increase in time.*