

The Mathematics of Relativity

	v/c	Sqrt(1-v ² /c ²)	Time (Note 1)	Length (Note 2)
Sound	0.000001	1.0000	1.0000	1.0000
	0.1	0.9950	1.0050	0.9950
	0.2	0.9798	1.0206	0.9798
	0.3	0.9539	1.0483	0.9539
	0.4	0.9165	1.0911	0.9165
	0.5	0.8660	1.1547	0.8660
	0.6	0.8000	1.2500	0.8000
	0.7	0.7141	1.4003	0.7141
	0.8	0.6000	1.6667	0.6000
	0.9	0.4359	2.2942	0.4359
	0.95	0.3122	3.2026	0.3122
	0.98	0.1990	5.0252	0.1990
Muons	0.99	0.1411	7.0888	0.1411
	0.994	0.1094	9.1424	0.1094
	0.9999	0.0141	70.7124	0.0141
	0.99999	0.0045	223.6074	0.0045
	0.999999	0.0014	707.1070	0.0014

Note 1: A second in the moving reference frame will be measured as this many seconds in the stationary reference frame.

Note 2: A meter stick in the moving reference frame will appear to be this many meters in the stationary reference frame.