

REFERENCE DATA

U.S. and Metric System Equivalents Length Equivalents

Unit	Millimeters	Centimeters	Inches	Feet	Yards	Meters
1 Millimeter =	1	.1	.03937	.003281	.001094	.001
1 Centimeter =	10	1	.3937	.032808	.010936	.01
1 Inch =	25.4001	2.54001	1	.08333	.027778	.025400
1 Foot =	304.801	30.4801	12	1	.33333	.304801
1 Yard =	914.402	91.4402	36	3	1	.914402
1 Meter =	1000	100	39.37	3.28083	1.09361	1

Unit	Feet	Yards	Meters	Mile (Statute)
1 Kilometer =	3280.8	1093.6	1000	.62137
1 Mile (Statute) =	5280	1760	1609.35	1

Weight Equivalents

Unit	Grains	Grams	Ounces (Troy)	Ounces (Avoird.)	Pounds (Troy)	Pounds (Avoird.)	Kilograms
1 Grain =	1	.064799	.002083	.002286	.000174	.000143	.000065
1 Gram =	15.4324	1	.32151	.035274	.002679	.002205	.001
1 Ounce (Troy) =	480	31.1035	1	1.09714	.083333	.068571	.031104
1 Ounce (Avoird.) =	437.5	28.3495	.911458	1	.075955	.0625	.028350
1 Pound (Troy) =	5760	373.242	12	13.1657	1	.822857	.373242
1 Pound (Avoird.) =	7000	453.592	14.5833	16	1.21528	1	.453592
1 Kilogram =	15432.4	1000	32.1507	35.2740	2.67923	2.20462	1

Unit	Kilograms	Pounds (Troy)	Pounds Avoird.)	Metric Tons	Net (Short) Tons	Gross (Long) Tons
1 Metric Ton =	1000	2679.23	2204.62	1	1.10231	.984206
1 Net (Short) Ton =	907.185	2430.56	2000	.907185	1	.892857
1 Gross (Long) Ton =	1016.05	2722.22	2240	1.01605	1.12	1

Troy Weight: 12oz. = 1 lb.

Avoirdupois Weight = 16oz. = 1 lb.

Metric System

Length	Weight
1 meter (m) 1 dekameter (dkm) 1 hectometer (hm) 1 kilometer (km)	1 gram (g) 1 dekagram (dkg) 1 hectogram (hg) 1 kilogram (kg) 1 metric ton
$= \begin{cases} 10 \text{ decimeters (dm)} \\ 100 \text{ centimeters (cm)} \\ 1,000 \text{ millimeters (mm)} \end{cases}$ $= \begin{cases} 10 \text{ meters (m)} \\ 100 \text{ meters (m)} \\ 1,000 \text{ meters (m)} \end{cases}$	$= \begin{cases} 10 \text{ decigrams (dg)} \\ 100 \text{ centigrams (cg)} \\ 1,000 \text{ milligrams (mg)} \end{cases}$ $= \begin{cases} 10 \text{ grams (g)} \\ 100 \text{ grams (g)} \\ 1,000 \text{ grams (g)} \end{cases}$ $= \begin{cases} 1,000 \text{ kilograms (kg)} \\ 1,000,000 \text{ grams (g)} \end{cases}$