

WEIGHTS AND MEASURES—U.S. TO METRIC

U.S. System				Metric Equivalent
Length				
	<u>Unit</u>	<u>Abbreviation</u>	<u>Equivalents in Other Units</u>	
Mile		mi	5280 feet, 320 rods, 1760 yards	1,609 kilometers
Rod		rd	5.50 yards, 16.5 feet	5.029 meters
Yard		yd	3 feet, 36 inches	0.914 meters
Foot		ft or ′	12 inches, 0.333 yards	30,480 centimeters
Inch		in or ″	0.083 feet, 0.027 yards	2.540 centimeters
Area				
	<u>Unit</u>	<u>Abbreviation</u>	<u>Equivalents in Other Units</u>	
Square Mile		sq mi or m ²	640 acres, 102,400 square rods	2,590 square kilometers
Acre		a	4840 square yards, 43,560 square feet	0.405 hectares, 4047 square meters
Square Rod		sq rd or rd ²	30.25 square yards, 0.006 acres	25.293 square meters
Square Yard		sq yd or yd ²	1296 square inches, 9 square feet	0.836 square meters
Square Foot		sq ft or ft ²	144 square inches, 0.111 square yards	0.093 square meters
Square Inch		sq in or in ²	0.007 square feet, 0.00077 square yards	6.451 square centimeters
Volume				
	<u>Unit</u>	<u>Abbreviation</u>	<u>Equivalents in Other Units</u>	
Cubic Yard		cu yd or yd ³	27 cubic feet, 46,656 cubic inches	0.765 cubic meters
Cubic Foot		cu ft or ft ³	1728 cubic inches, 0.0370 cubic yards	0.028 cubic meters
Cubic Inch		cu in or in ³	0.00058 cubic feet, 0.000021 cubic yards	16.387 cubic centimeters
Mass & Weight				
	<u>Unit</u>	<u>Abbreviation</u>	<u>Equivalents in Other Units</u>	
Ton		tn (seldom used)		
short ton			20 short hundredweight, 2000 pounds	0.907 metric tons
long ton			20 long hundredweight, 2240 pounds	1.016 metric tons
Hundredweight		cwt		
short hundredweight			100 pounds, 0.05 short tons	45.359 kilograms
long hundredweight			112 pounds, 0.05 long tons	50.802 kilograms
Pound		lb or lb av also #	16 ounces, 7000 grains	0.453 kilograms
Ounce		oz or oz av	16 drams, 437.5 grains	28.349 grams
Dram		dr or dr av	27.343 grains, 0.0625 ounces	1.771 grams
Grain		gr	0.036 drams, 0.002285 ounces	0.0648 grams
Capacity				
	<u>Unit</u>	<u>Abbreviation</u>	<u>U.S. Liquid Measure</u>	
Gallon		gal	4 quarts (231 cubic inches)	3.785 liters
Quart		qt	2 pints (57.75 cubic inches)	0.946 liters
Pint		pt	4 gills (28.875 cubic inches)	0.473 liters
Gill		gi	4 fluidounces (7.218 cubic inches)	118.291 milliliters
Fluidounce		fl oz	8 fluidrams (1.804 cubic inches)	29.573 milliliters
Fluidram		fl dr	60 minims (0.225 cubic inches)	3.696 milliliters
Minim		min	1/60 fluidram (0.003759 cubic inches)	0.061610 milliliters

WEIGHTS AND MEASURES—U.S. TO METRIC (Continued)

U.S. System (Continued)		Metric Equivalent (Continued)
Power		
<u>Unit</u>	<u>Abbreviation</u>	
Horsepower	hp	0.746 kilowatt
Heat		
<u>Unit</u>	<u>Abbreviation</u>	
British thermal unit	BTU	0.293 watt
Pressure or Vacuum		
<u>Unit</u>	<u>Abbreviation</u>	
Pounds per square inch	psi	6.895 kilopascal
Torque		
<u>Unit</u>	<u>Abbreviation</u>	
ounce inch	oz/in.	0.007 newton-meters
ounce inch	lb/in.	0.113 newton-meters
pound foot	lb/ft	1.346 newton-meters
Temperature		
<u>Unit</u>	<u>Abbreviation</u>	
Fahrenheit	°F	$(^{\circ}\text{F} - 32) 0.556 = ^{\circ}\text{C}$