

Customary and Metric Units of Measurement Conversions

Customary Units of Linear Measure

1 foot (ft) = 12 inches (in)
1 yard (yd) = 3 ft
1 yd = 36 in
1 mile (mi) = 5280 ft
1 mi = 1760 yd

Metric Units of Linear Measure

1000 millimeters (mm) = 1 meter (m)
100 centimeters (cm) = 1 m
10 decimeters (dm) = 1 m
0.1 dekameter (dam) = 1 m
0.01 hectometer (hm) = 1 m
0.001 kilometer (km) = 1 m

Customary Units of Area

1 square foot (sq ft) = 144 sq in
1 sq yd = 9 sq ft
1 acre (A) = 43,680 sq ft
1 sq mi = 640 acre

Metric Units of Area Measure

1,000,000 sq mm = 1 sq m
10,000 sq cm = 1 sq m
100 sq dm = 1 sq m
1 sq m = 1 sq m
0.01 sq dam = 1 sq m
0.001 sq hm = 1 sq m
0.000 001 sq km = 1 sq m

Customary Units of Volume

1 cubic ft (cu ft) = 1,728 cu in
1 cu yd = 27 cu ft

Metric Units of Volume Measure

1,000,000,000 cu mm = 1 cu m
1,000,000 cu cm = 1 cu m
1000 cu dm = 1 cu m

Customary Units of Capacity Measure

16 ounces (oz) = 1 pint (pt)
2 pt = 1 quart (qt)
4 qts = 1 gallon (gal)

Common Capacity-Cubic Measure Equivalents

1 gal = 231 cu in
7.5 gal = 1 cu ft

Metric Units of Capacity Measure

1000 milliliters (mL) = 1 liter (L)

Commonly Used Capacity-Cubic Measure Equivalents

1 mL = 1 cu cm
1 L = 1 cu dm
1 L = 1000 cu cm
1000 L = 1 cu m

Customary Units of Weight Measure

16 oz = 1 pound (lb)
2,000 lb = 1 net or short ton
2,240 lb = 1 gross or long ton

Metric Units of Weight (Mass) Measure

1000 milligrams (mg) = 1 gram (g)
1000 g = 1 kilogram (kg)
1000 kg = 1 metric ton (t)

Metric/ Customary Units of Conversion

Metric / Customary Length Conversions

1 in = 2.54 cm
1 ft = 30.48 cm
1 yd = 0.9144 m
1 mi $\approx$ 1.6093 km

Metric / Customary Volume Conversions

1 cu in = 16.387 cu cm
1 fluid ounce $\approx$ 29.574 mL
1 teaspoon (tsp) $\approx$ 4.929 mL
1 tablespoon (tbsp) $\approx$ 14.787 mL
1 cup $\approx$ 236.6 mL
1 quart $\approx$ 0.9464 L
1 gallon $\approx$ 3.785 L

Metric / Customary Area Conversions

1 sq in = 6.4516 sq cm
1 sq ft $\approx$ 0.0929 sq m
1 sq yd $\approx$ 0.8361 sq m
1 sq mi $\approx$ 2.59 sq km

Metric / Customary Weigh Conversions

1 ounce = 28.35 g
1 pound $\approx$ 0.4536 kg
1 ton $\approx$ 907.2 kg