

Metric and U.S. Measurement Equivalencies

Metric System Prefixes							
Prefix	kilo	hecto	deka	base unit	deci	centi	milli
Symbol	k	h	da	m g L	d	c	m

LENGTH

1 m = 1,000 millimeters (mm)
 1 m = 100 centimeters (cm)
 1 m = 10 decimeters (dm)
 1 m = 0.1 dekameters (dam)
 1 m = 0.01 hectometers (hm)
 1 m = 0.001 kilometers (km)

WEIGHT

1 g = 1,000 mg
 1 kg = 1,000 g
 1 mg = 0.001 g
 1 g = 0.001 kg
 1 t = 1,000 kg

CAPACITY

1 L = 1,000 mL
 1 kL = 1,000 L
 1 mL = 0.001 L
 1 cm³ = 1 mL = 1g

Metric System

1 ft = 12 in

1 yd = 3 ft

1 yd = 36 in

1 mi = 5,280 ft = 1,760 yd

1 lb = 16 oz

1 ton = 2,000 lb

1 cup = 8 fl oz

1 pint = 2 cups

1 quart = 2 pints = 4 cups

1 gallons = 4 quarts

1 gallons = 128 fl oz

U.S. Customary System

1 in = 2.54 cm

1 m = 3.28 ft

1 m = 1.09 yd

1 mi = 1.61 km

1 ft = 30.48 cm

1 yd = 0.9 m

1 oz = 28 g

1 lb = 454 g

1 kg = 2.2 lb

1 ton (T) = 0.9 tonne (t)

1 L = 1.06 quarts

1 gallon = 3.79 L

1 cup = 0.24 L

1 pint = 0.47 L

1 quart = 0.95 L

Conversion between U.S. and Metric Systems

AREA

1 ft² = 144 in²

1 yd² = 9 ft²

1 acre = 43,560 ft²

1 mi² = 640 acres

1 acre = 4,840 yd²

1 in² = 6.5 cm²

1 ft² = 0.09 m²

1 yd² = 0.8 m²

1 mi² = 2.6 km²

1 acre = 0.4 hectare

VOLUME

1 gal = 231 in³

1 yd³ = 202 gal

1 ft³ = 7.48 gal

1 ft³ = 1,728 in³

1 yd³ = 27 ft³

1 ft³ fresh water = 62.5 lb

1 ft³ salt water = 64 lb

TEMPERATURE

$$F = \frac{9}{5}C + 32$$

$$C = \frac{5}{9}(F - 32)$$

INTEREST

$$I = Prt$$

$$A = P \left(1 + \frac{r}{n} \right)^{nt}$$

$$E = \left(1 + \frac{r}{n} \right)^n - 1$$