

Length

Abbreviations

English	Metric
inches (in.)	millimeter (mm)
feet (ft)	centimeter (cm)
yard (yd)	meter (m)
mile (mi)	kilometer (km)

Conversions

English to English Metric to Metric

1 ft = 12 in.	1 cm = 10 mm
1 yd = 3 ft	1 m = 100 cm
1 mi = 1,760 yd	1 km = 1,000 m
1 mi = 5,280 ft	

English to Metric Metric to English

1 in. = 2.54 cm	1 cm = 0.3937 in.
1 ft = 0.3048 m	1 m = 3.281 ft
1 yd = 0.9144 m	1 m = 1.094 yd
1 mi = 1.609 km	1 km = 0.6214 mi

Area

Abbreviations

English	Metric
square inches (in. ²)	square millimeters (mm ²)
square feet (ft ²)	square centimeters (cm ²)
square yards (yd ²)	square meters (m ²)
acres (ac)	hectares (ha)
square miles (mi ²)	square kilometers (km ²)

Conversions

English to English Metric to Metric

1 ft ² = 144 in. ²	1 cm ² = 100 mm ²
1 yd ² = 9 ft ²	1 m ² = 10,000 cm ²
1 ac = 4,840 yd ²	1 ha = 10,000 m ²
1 ac = 43,560 ft ²	
1 mi ² = 640 ac	1 km ² = 100 ha
1 mi ² = 27,880,000 ft ²	

English to Metric Metric to English

1 in. ² = 6.452 cm ²	1 cm ² = 0.1550 in. ²
1 ft ² = 0.09290 m ²	1 m ² = 10.7639 ft ²
1 yd ² = 0.8361 m ²	1 m ² = 1.196 yd ²
1 ac = 0.4047 ha	1 ha = 2.471 ac
1 mi ² = 259.0 ha	1 ha = 0.003861 mi ²

Volume

Abbreviations

English	Metric
cubic inches (in. ³)	cubic centimeters (cm ³)
cubic feet (ft ³)	cubic meters (m ³)
cubic yards (yd ³)	milliliters (mL)
teaspoon (tsp)	liters (L)
tablespoon (tbsp)	hectoliters (hL)
fluid ounces (fl oz)	
pint (pt)	
quart (qt)	
U.S. gallon (gal.)	
Imperial gallon (Imp gal.)	
bushel (bu)	
acre feet (ac ft)	

Conversions

English to English Metric to Metric

1 tbsp = 3 tsp	1 m ³ = 1,000,000 cm ³
2 tbsp = 1 fl oz	1 mL = 1 cm ³
1 cup = 8 fl oz	1 L = 1,000 mL
1 pt = 16 fl oz	1 hL = 100 L
1 qt = 32 fl oz	
1 gal. = 128 fl oz	
1 Imp gal. = 1.201 gal.	
1 bu = 1.244 ft ³	
1 ac ft = 43,560 ft ³	

English to Metric Metric to English

1 in. ³ = 16.39 cm ³	1 cm ³ = 0.06102 in. ³
1 ft ³ = 0.02832 m ³	1 m ³ = 35.32 ft ³
1 yd ³ = 0.7646 m ³	1 m ³ = 1.308 yd ³
1 bu = 0.3524 hL	1 hL = 2.838 bu
1 ac ft = 1,234 m ³	1 m ³ = 0.0008107 ac ft

Mass (weight)

Abbreviations

English	Metric
avoirdupois ounces (oz)	grams (g)
pounds (lb)	kilograms (kg)
short ton (t)	metric ton (mt)

Conversions

English to English Metric to Metric

1 lb = 16 oz	1 kg = 1,000 g
1 t = 2,000 lb	1 mt = 1,000 kg

English to Metric Metric to English

1 oz = 28.35g	1 g = 0.03527 oz
1 lb = 0.4536 kg	1 kg = 2.205 lb
1 t = 907.2 kg	1 kg = 0.001102 t
1 t = 0.9072 mt	1 mt = 1.102 t

Pressure (mass per unit area)

Abbreviations	
English	Metric
pounds per square inch (psi)	bar (b)
atmospheres (atm)	megapascal (MPa)
Conversions	
English to English	Metric to Metric
1 psi = 0.06805 atm	1 MPa = 10 b
English to Metric	Metric to English
1 psi = 0.06895 b	1 b = 14.50 psi
1 psi = 0.006895 MPa	1 MPa = 145.0 psi
1 atm = 1.013 b	1 b = 0.9869 atm
1 atm = 0.1013 MPa	1 MPa = 9.869 atm

Temperature

Abbreviations	
English	Metric
degrees Fahrenheit (°F)	degrees Celsius (°C)
Conversions	
English to Metric	Metric to English
0°F = 1.800 (°C) + 32	0°C = 0.5556 (°F - 32)

Flow (volume per unit time)

Abbreviations	
English	Metric
gallons per minute (gpm)	liters per minute (Lpm)
cubic feet per second (cfs)	cubic meters per second
cubic feet per minute (cfm)	(cms)
Conversions	
English to English	Metric to Metric
1 cfs = 448.8 gpm	1 cms = 60,000 Lpm
1 cfm = 0.01667 cfs	
1 cfm = 7.480 gpm	
English to Metric	Metric to English
1 cfs = 0.02832 cms	1 cms = 35.32 cfs
1 cfs = 1,699 Lpm	1 Lpm = 0.0005886 cfs
1 gpm = 0.00006309 cms	1 cms = 15,850 gpm
1 gpm = 3.785 Lpm	1 Lpm = 0.2642 gp m
1 cfm = 0.0004720 cms	1 cms = 2,119 cfm
1 cfm = 28.32 Lpm	1 Lpm = 0.03532 cfm

All conversions contain four significant figures or are exact.

Seedbed density

Abbreviations	
English	Metric
lineal bed foot (bed ft)*	lineal bed meter (bed m)*
square foot (ft ²)	square meter (m ²)
Conversions	
~~~~ 42-inch usable bed space * * ~ ~ ~ ~	
<b>English to English</b>	<b>Metric to Metric</b>
1 bed ft = 3.5 ft ²	1 bed m = 1.067 m ²
<b>English to Metric</b>	<b>Metric to English</b>
1 bed ft = 0.3252 m ²	1 bed m = 11.48 ft ²
1 ft ² = 0.09290 m ²	1 m ² = 10.76 ft ²
1 ft ² = 0.08709 bed m	1 m ² = 3.075 bed ft
~~~~ 48-inch usable bed space * * ~ ~ ~ ~	
English to English	Metric to Metric
1 bed ft = 4 ft ²	1 bed m = 1.219 m ²
English to Metric	Metric to English
1 bed ft = 0.3716 m ²	1 bed m = 13.12 ft ²
1 ft ² = 0.09290 m ²	1 m ² = 10.76 ft ²
1 ft ² = 0.07620 bed m	1 m ² = 2.691 bed ft
*One lineal bed ft (or 1 lineal bed m) equals an area of seedbed 1 ft (or 1 m) long times the width of the bed.	
**Usable bed space is the area of seedbed actually occupied by seedlings.	

Fertilizer

Abbreviations	
English	Metric
ounces per square foot (oz/ft ²)	grams per square meter (g/m ²)
pounds per acre (lb/ac)	kilograms per hectare (kg/ha)
parts per million (ppm)	
Conversions	
English to English	Metric to Metric
1 oz/ft ² = 2722 lb/ac	1 g/m ² = 10 kg/ha
English to Metric	Metric to English
1 lb/ac = 1.121 kg/ha	1 kg/ha = 0.8921 lb/ac
Other useful fertilizer conversions	
phosphorus (P) = phosphoric acid (P ₂ O ₅) x 0.4364	
P ₂ O ₅ = P x 2.291	
potassium (K) = potash (K ₂ O) x 0.8301	
K ₂ O = K x 1.205	
pounds per acre to parts per million	
If 1 acre-foot of soil weighs approximately 4 million pounds, then 1 plow-slice (9 inches deep) weighs 3 million pounds per acre. Therefore:	
1 ppm = 3 lb/ac	
1 lb/ac = 0.3333 ppm	