

Factor Label Method

(Notes on how to convert using conversion factors)

- I. Conversion Factor: a ratio that can be used to convert from one unit to another.
- The numerator and the denominator are equal to each other
 - The denominator's unit should be the same as the given numbers unit
 - The numerator's unit will be the unit you want to convert to

Example of a conversion factor: $\frac{4 \text{ quarters}}{1 \text{ dollar}}$ or $\frac{12 \text{ eggs}}{1 \text{ dozen}}$

- II. Factor Label Method Procedure:
1. Write the given number and unit
 2. Set up a conversion factor (fraction used to convert one unit to another)
 3. Place the given unit as denominator of conversion factor
 4. Place desired unit as numerator
 5. Cancel units
 6. Solve Problem
- III. Factor Label Method Procedure (Metric to Metric):
1. Write the given number and unit
 2. Set up a conversion factor (fraction used to convert one unit to another)
 3. Place the given unit as denominator of conversion factor
 4. Place desired unit as numerator
 5. Place a "1" in front of the larger unit
 6. Determine the number of smaller units needed to make "1" of the larger unit
 7. Cancel units
 8. Solve Problem

Metric System Units

			(Number of base units needed to make one)
Grand	Giga	G	1,000,000,000
Master	Mega	M	1,000,000
King	Kilo	K	1,000
Henry	Hecto	H	100
Died	Deka	Da	10
By	Base Unit	Liter, Meter, Gram	
			(Number needed to make one base unit)
Drinking	Deci	d	10
Chocolate	Centi	c	100
Milk	Milli	m	1,000
Monday	Micro	μ	1,000,000
Night	Nano	n	1,000,000,000

Other Important Conversions:

12 in. = 1ft
 2 pt = 1 qt
 1 lb = 454 g
 1 in = 2.54 cm

3 ft = 1 yd
 4 qt = 1 gal
 1 lb = 16 oz
 1 m = 39 in

5280 ft = 1 mi
 1 qt = 0.946 L
 1 metric ton = 2200 lb
 1 mi = 1.61 Km

1760 yd = 1 mi
 1 qt = 32 fl oz