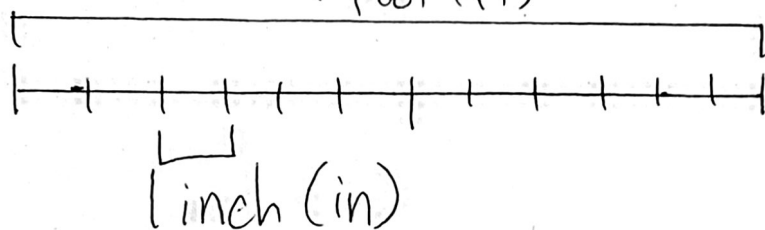


Noteset 1 L - Imperial Unit Conversions

Unit - Fundamental division of matter
1 foot (ft)

Ex: Length



Unit Conversion - Changing one unit to another unit of the same type.

Ex: 12 ft, convert to in = 144 in

Conversion Factor - An equality (equal equation) between two units

Ex 1 ft = 12 in (length conversion)

1 gal = 4 gts (volume conversion)

Table of Unit Conversions

<u>Mass</u>	<u>Volume</u>	<u>Length</u>
1 lb = 16 oz	1 gal = 4 qt	1 mi = 5280 ft
1 ton = 2000 lb	1 qt = 2 pts	1 mi = 1760 yd
	1 pt = 2 cups	1 yd = 3 ft
	1 cup = 16 tbsp	1 yd = 36 in
		1 ft = 12 in

Conversion Process

T-chart / Railroad Method

(start) A $\xrightarrow{\text{(convert)}}$ (end) B $\leftarrow$ Problem

conversion : (conv.) A = (conv.) B $\leftarrow$ Conversion Factor

(start) A $\xrightarrow{\times \text{ (mult.)}}$ (conv) B $\leftarrow$ Cancel "A"
 $\downarrow$ $\div$ $\leftarrow$ Multiply then Divide
(conv) A $\downarrow$ (Div.)

$$= \frac{(\text{start}) \cdot (\text{conv}) B}{(\text{conv})} = \frac{(\text{end}) B}{\text{answer}} \leftarrow \text{Math}$$

Ex: $3.29 \text{ ft}_{(A)} \rightarrow \text{in}_{(B)}$
 $1 \text{ ft}_{(A)} = 12 \text{ in}_{(B)}$

$$\begin{array}{c|c} 3.29 \text{ ft}_{(A)} & 12 \text{ in}_{(B)} \\ \hline & 1 \text{ ft}_{(A)} \end{array}$$

$$= \underline{\underline{39.48 \text{ in}}}$$

Ex 2 $130.2 \text{ oz}_{(A)} \rightarrow \text{lb}_{(B)}$
 $16 \text{ oz}_{(A)} = 1 \text{ lb}_{(B)}$

$$\begin{array}{c|c} 130.2 \text{ oz}_{(A)} & 1 \text{ lb}_{(B)} \\ \hline & 16 \text{ oz}_{(A)} \end{array}$$

$$= \underline{\underline{8.14 \text{ lb}}}$$