1/17/12 7.7 Changing Customary Units

P. 350

Length

1 ft = 12 in

1 yd = 3 ft = 36 in.

1 mi = 1760 yds = 5280 ft.

Weight

1 lb = 16 oz

1 T = 2000 lbs.

Capacity

1 c = 8 fl. oz.

1 pt. = 2 c

1 qt = 2 pt.

1 gal = 4 qt.

Changing Units Using multiplication

① 3ft + 7in.

② 3ft
× 12 in per foot
36 inches

36+7

③ 43 in.

length

1ft = 12 in

1yd = 3ft = 36 in

1 mi = 1760yd = 5280ft = 63,360 in.

Changing Units by Dividing

① 35oz $\quad \frac{35}{16}$

② $16\overline{)35}$ 2 lbs
-32
oz. $\rightarrow 3$

weight
1 lb = 16 oz.
1 T = 2000 lb = 32,000 oz.

③ 2 lbs 3 oz.

26 fl. oz. 1c = 8 fl. oz

$$8 \overline{)26}$$

$$\begin{array}{r} 3 \\ 8\,\overline{)\,26} \\ -24 \\ \hline 2 \end{array} = 3\frac{2}{8} = 3\frac{1}{4}\text{c.}$$

$2\frac{1}{4}$ ft

$2\text{ ft} = 24$ in.

$\frac{1}{4}\text{ ft} = +\ 3$ in.

27 in.

twenty seven

$\frac{27}{36} = \frac{3}{4}$ yd.

out of

thirty six

$$\begin{array}{r} 3\text{ft}\ \ 2\text{in} \\ +\ 1\text{ft}\ \ 11\text{in.} \\ \hline 4\text{ft.}\ \ 13\text{in.} \end{array}$$

$$\begin{array}{r} 5\text{ft}\ \ 1\text{in.} \\ \hline \end{array}$$

$$\begin{array}{r} {}^{14} \\ 2\not{3}\text{ft}\ {}^{+12}2\text{in} \\ -\ 1\text{ft}\ \ 11\text{in} \\ \hline {}^{19}\ \ 1\text{ft.}\ \ 3\text{in} \end{array}$$

$$\begin{array}{r} {}^{1}\not{2}\text{lbs}\ {}^{+16}3\text{oz} \\ -\ 1\text{lb}\ \ 4\text{oz} \\ \hline 15\text{oz.} \end{array}$$

In Class:

p. 352-353

#s 2-38 even.

HW: WS 7.7

#s 1-31 odd.

(10) $1\frac{1}{3}$ c → ? quarts

$1\frac{1}{3} \div 4$

$\frac{4}{3} \div \frac{4}{1} = \frac{\cancel{4}^{1}}{3} \times \frac{1}{\cancel{4}_{1}} = \frac{1}{3} \times \frac{1}{1} = \frac{1}{3}$ qt.

capacity

1 pt = 1 c = 8 fl oz
2 c = 16 fl oz.

1 qt. = 2 pt = 4 c = 32 fl. oz.

1 gal = 4 qt. = 8 pt. = 16 c = 128 fl. oz.