A3 Notes #3 - Conversions. (day 2)

Note Title 11/02/2015

Percents	Fraction	Decimal
15%	$\frac{15}{100}$	0.15
100%	$\frac{100}{100}$	1.0

Recall:

- From DECIMAL to a PERCENT, multiply by 100.

ex: $0.75 \times 100 = 75\%$

(2 zeros; move decimal 2 places Right)

- From DECIMAL to a FRACTION, count place values and make the denominator the place value. The numerator is the number with NO decimal.

ex: $0.14 = \frac{14}{100}$ (hundredths) $\qquad 0.000702 = \frac{702}{1{,}000{,}000}$ (millionth)

- From FRACTION to a PERCENT

Method ① make denominator 100 by multiplying or dividing (both NUM & DENO.) to create an equivalent fraction. Numerator is Percent.

ex: $\frac{7}{10} \overset{\times 10}{=} \frac{70}{100} \rightarrow 70\%$ (×10)

Method ② divide the numerator by the denominator. This gives you a decimal, then multiply by 100.

ex: $\frac{5}{8}$ $\quad 5 \div 8 = 0.625 \times 100 = 62.5\%$

NEW From a FRACTION to a DECIMAL, divide the numerator by the denominator.

ex: Rounded to nearest hundredth. $\frac{31}{39} = 0.794871 = 0.79$

(look HERE; leave it.)

- From a PERCENT to a DECIMAL, divide by 100.

ex: 32.7% ÷ 100 = 0.327

(move 2 places left; 2 zeros)

⭐ BE CAREFUL ⭐ when your PERCENT contains a FRACTION you must convert fraction to decimal.

ex: $14\frac{2}{5}\%$ → 14.4% ÷ 100 = 0.144

(confusing! $2 \div 5 = 0.4$)

- From a PERCENT to a FRACTION, take the exact percent (but convert fraction percent into a decimal) and use it as the numerator over a denominator of 100. Then multiply by 10's on num. & den. until the decimal is gone.

ex: $72\% = \frac{72}{100}$ $\quad 13.9\% = \frac{13.9}{100} \overset{\times 10}{\underset{\times 10}{}} = \frac{139}{1{,}000}$

$\frac{3}{4}\% = 0.75\% = \frac{0.75}{100} \overset{\times 100}{\underset{\times 100}{}} = \frac{75}{10{,}000}$

$3 \div 4 =$