Fractions, Decimals, and Percents Notes

Vocabulary
Numerator – Top number of a fraction or part of the whole.
Denominator – Bottom number of a fraction or the whole.

Fraction to Decimal
To convert a fraction to a decimal - divide the numerator by the denominator. (top in, bottom out)

$\frac{1}{4}$ $4\overline{)1}$ .25 $\frac{3}{7}$ $7\overline{)3}$ .428

Decimal to Fraction
To convert a decimal to a fraction - write it like you say it, then simplify, if needed.

.7   "seven tenths" $\frac{7}{10}$ 4.28   "four and twenty eight hundredths" $4\frac{28}{100} = 4\text{ —}$

Decimal to Percent
To convert a decimal to a percent - move the decimal point two places to the RIGHT and add a percent sign.

2.36 -> 2.36 -> 236%   0.03 -> 0.03 -> 3%

Percent to Decimal
To convert a percent to a decimal - move decimal point two places to the LEFT and remove the percent sign.

32% -> 32% -> 0.32   100% -> 100% -> 1.00

Percent to Fraction
To convert a percent to a fraction - first convert to a decimal, and then convert the decimal to a fraction.

Percent to Decimal   Decimal to Fraction

32% -> 32% -> 0.32 -> " thirty two hunderdthes" -> $\frac{32}{100}$

Fraction to Percent
To convert a fraction to a percent - first convert to a decimal, then convert the decimal to percent.
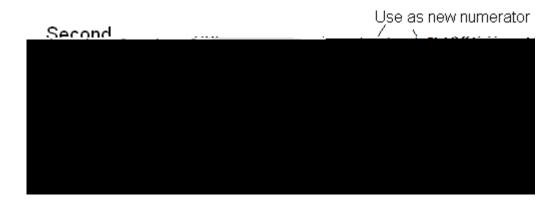
Fraction to Decimal

— Divide numerator by denominator $3\overline{)8}$ 0.375   0.375   37.5%

Mixed Numbers and Improper Fractions

Mixed Number to Improper Fraction

To covert a mixed number to an improper fraction - multiply the denominator by the whole number, then add the numerator. Use that number as your new numerator, keep the same denominator. (popcorn or ABC, 123)

Use as new numerator

Second

Improper Fraction to Mixed Number

To convert an improper fraction to a mixed number – divide the numerator by the denominator. The remainder should be in fraction form with the remainder as the numerator and the denominator the same as the original improper fraction's denominator.

$$\frac{13}{4} \longleftrightarrow 3\frac{1}{4}$$

the denominators in both fractions are the same

divide the numerator by the denominator

use the remained as the numerator

$$3\frac{1}{4}$$
$$4\overline{)13}$$