

# 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)

$$\frac{1}{4} \rightarrow 4 \overline{)1} \rightarrow .25$$

$$\frac{3}{7} \rightarrow 7 \overline{)3} \rightarrow .428$$

## Decimal to Fraction

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

$$.7 \rightarrow \text{"seven tenths"} \rightarrow \frac{7}{10}$$

$$4.28 \rightarrow \text{"four and twenty eight hundredths"} \rightarrow 4 \frac{28}{100} = 4 \frac{7}{25}$$

## Decimal to Percent

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

$$2.36 \rightarrow 2.36 \rightarrow 236\%$$

$$0.03 \rightarrow 0.03 \rightarrow 3\%$$

## Percent to Decimal

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

$$32\% \rightarrow 32\% \rightarrow 0.32$$

$$100\% \rightarrow 100\% \rightarrow 1.00$$

## 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

$$32\% \rightarrow 32\% \rightarrow 0.32 \rightarrow \text{"thirty two hundredths"} \rightarrow \frac{32}{100}$$

## Fraction to Percent

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

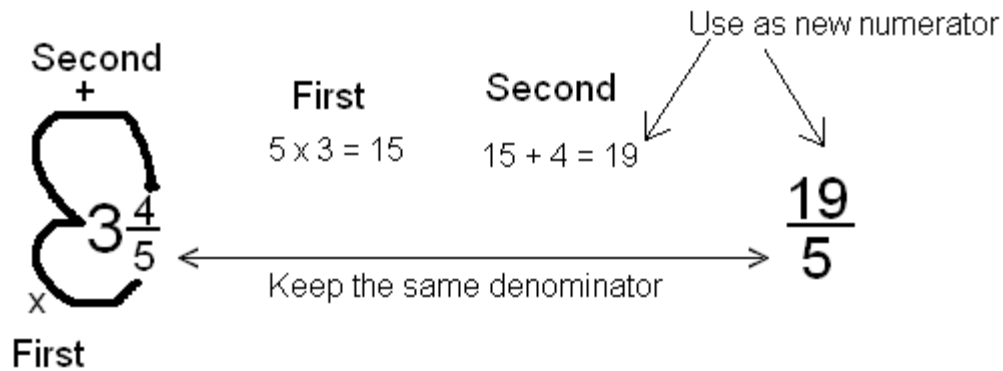
Fraction to Decimal

$$\frac{3}{8} \rightarrow \text{Divide numerator by denominator} \rightarrow 8 \overline{)3} \rightarrow 0.375 \rightarrow 0.375 \rightarrow 37.5\%$$

## Mixed Numbers and Improper Fractions

### Mixed Number to Improper Fraction

●To convert 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)



### 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.

