

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.

$$2.36 \rightarrow 2.\underline{36} \rightarrow 236\%$$

$$0.03 \rightarrow 0.\underline{03} \rightarrow 3\%$$

Percent to Decimal

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

$$32\% \rightarrow \underline{32}\% \rightarrow 0.32$$

$$100\% \rightarrow \underline{100}\% \rightarrow 1.00$$

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

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

Fraction to Percent

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

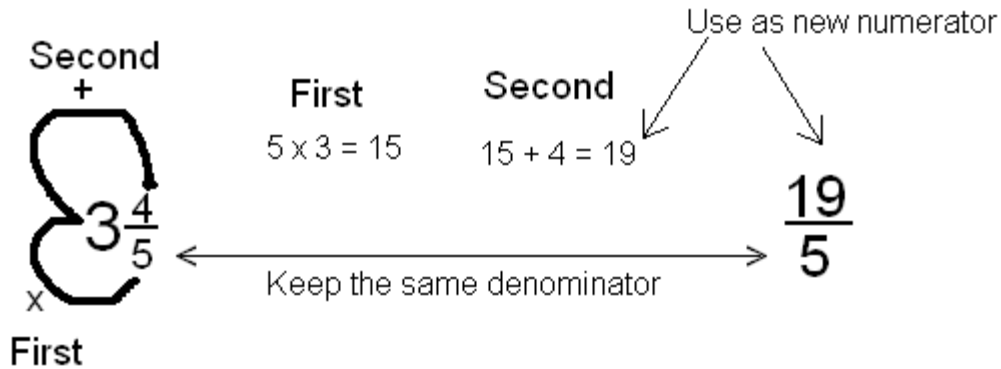
Fraction to Decimal

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

Mixed Numbers and Improper Fractions

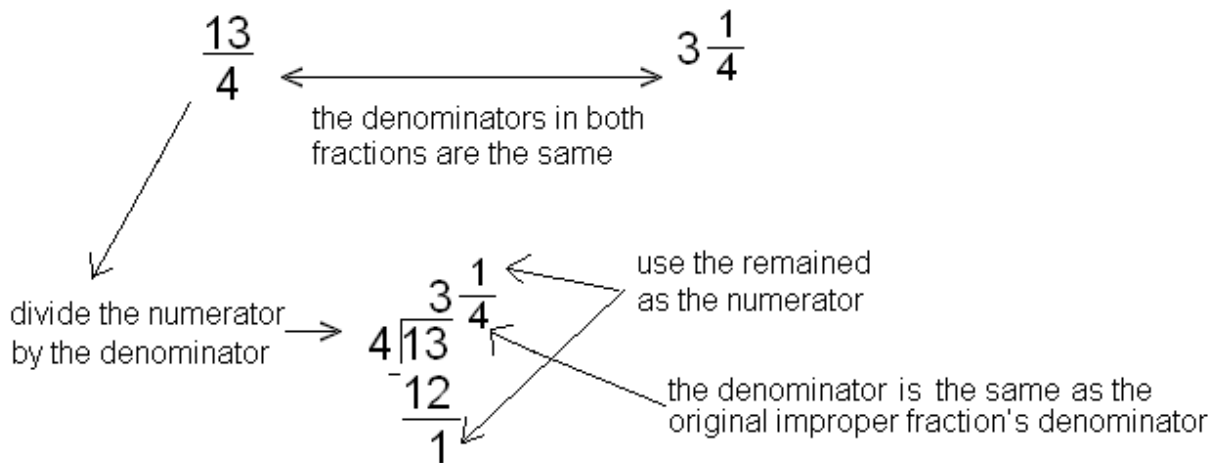
Mixed Number to Improper Fraction

•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.



Practice

Write the following numbers as fractions.

1. 2.25

2. 62%

3. 0.5

4. 75%

5. 100%

Write the following numbers as decimals.

6. $\frac{3}{4}$

7. 3.12%

8. $3\frac{3}{5}$

9. 0.65%

10. $\frac{1}{10}$

11. 4.36

12. $\frac{1}{4}$

13. 800

14. $5\frac{1}{2}$

15. 100