PERCENTAGES

Percentages are ratios. The term *percent* means "one part per hundred."

Example: $30\% = \dfrac{30}{100}$

Every percent is really a fraction with 100 as its denominator. That also means that every fraction with 100 as its denominator can be written as a percent.

Example: $\dfrac{30}{100} = 30\%$

Percents can also be expressed as decimals.

Example: $30\% = .30$

Therefore, there is a relationship among percents, decimals and fractions.

Example: $30\% = .30 = \dfrac{30}{100}$

$17\% = .17 = \dfrac{17}{100}$

To Change a Fraction to a Percent

Divide the numerator by the denominator.

Example: $\dfrac{2}{5} = 5\overline{\smash{)}2.00}\ \ ^{.40}$

40%   Then change the decimal to a percent.

To Change a Percent to a Fraction

Express it as a fraction and reduce.

Example: 40%

$40\% = \dfrac{40}{100} = \dfrac{4}{10} = \dfrac{2}{5}$

To Compare Fractions, Decimals and Percents

Change them all to decimals.

Example: Put the following in order least to greatest; $\dfrac{1}{2}$, .25, 35%

1st Step $\dfrac{1}{2} = 2\overline{\smash{)}1.00}\ \ ^{.50}$ Change fraction and percent to decimals.

$35\% = .35$

2nd Step   Now compare; .50   .35   .25   Compare the decimals.

3rd Step   Least to greatest; .25 < .35 < .50   Order.

so

4th Step $.25 < 35\% < \dfrac{1}{2}$ Put in original form. Order.