METHODS AND MEANINGS

Ratios

A **ratio** is a comparison of two numbers, often written as a quotient; that is, the first number is divided by the second number (but not zero). A ratio can be written in words, in fraction form, or with colon notation. Most often, in this class, you will either write ratios in the form of fractions or state the ratios in words.

For example, if there are 38 students in a school band and 16 of them are boys, you can write the ratio of the number of boys to the number of girls as:

16 boys to 22 girls $\frac{16 \text{ boys}}{22 \text{ girls}}$ 16 boys : 22 girls

MATH NOTES

Making Equivalent Ratio's

Using the example above (the ratio
of boys to girls in the School band is $\frac{16 \text{ boys}}{22 \text{ girls}}$)

What if there were 44 girls?
How would you figure out the amount of boys?

You would make an equivalent ratio

$$\frac{16 \text{ boys}}{22 \text{ girls}} \cdot \frac{2}{2} = \frac{32 \text{ boys}}{44 \text{ girls}}$$

Answer...
There would
be 32 boys

$44 \div 22 = 2$