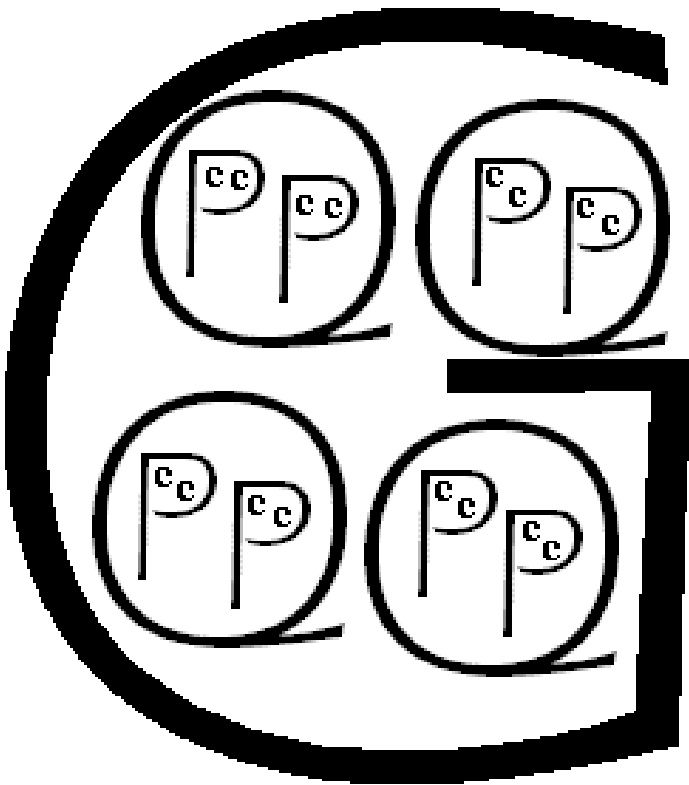


Comments on Rates and Ratios

1. If the two measures that are being compared measure the same type of thing, such as length or volume, then it can be written as a ratio. **You may have to convert these and if you don't, they will be wrong!**
2. Ratios and rates are numerical ways to compare two individual sets, so even if the ratio simplifies to a whole number, it **must** be written as an improper fraction.
Example: 36 minutes to 12 minutes = 3 : 1, 3 to 1, or $\frac{3}{1}$ NOT as just "3".
3. One nice way of remembering the volume conversions is the Big "G":



1 gallon = 4 quarts
2 pints = 1 quart
2 cups = 1 pint

4. You **must, must, must** label rates since they are in different terms. You'll need to be able to do this for the word problems you're going to encounter!
5. Best buy on items: In calculating the best buy on an item, you're looking for the smallest **cost per unit**. In other words, the cost should be the **top** of your fraction in this case. If you put the cost on the bottom, then you're looking for the largest quantity per **dollar**, not the smallest. Be careful!