**Markup** is the amount of money by which the cost of an item is increased. If a retailer purchases an item from a wholesaler for $3.25 and the percent increase is 90%, that means that the markup will be:

 $3.25 $3.25
 x .90 +$0.29
 $.2925 or $.29 more than the original cost. $3.54

**Markdown** is the amount of money by which the cost of an item is decreased. If a retailer has an item that is priced at $3.54 and wants to sell it for less 20% less than this price, the markdown will be:

 $3.54 $3.54
 x .20 -$0.71
 $0.708 or $0.71 less than the original price $2.83
**\*Markdown is generally referred to as “discount”**

**Percent increase** is the percent by which a number is increased. If a store *originally* purchases an item for $8.77 and then sells the item at a *new* price of $12.75, you will find the percent by which the price increases.

To find the percent increase, you will find the *difference* of the **original value** and the **new value**, then divide the difference by the **original value**.

**Original – New** $8.77 - $12.75 $3.98 $≈$ .45 = 45%  **Original** $8.77 $8.77

The percent increase is 45%

**Percent decrease** is the percent by which a number is decreased. If you buy a gaming system for $299.99 and want to sell it a year later, you would sell it at a lower price because it gone down in value. You might sell it for 239.99.
To find the percent decrease, you will find the *difference* of the **original value** and the **new value**, then divide the difference by the **original value**.

**Original – New** $299.99 - $249.99 $50.00 $≈$ .1666 = 17%  **Original** $299.99 $299.99

The percent decrease is 17%

**The process for finding the percent increase and the percent decrease is the same. It is important to determine whether you are finding an increase or decrease prior to starting the work. When you find the difference between the original and new values for an increase, the numerator will always be negative, since the new value will be greater than the original value. Your answer will appear to be negative, however, predetermining an increase or decrease will solve any confusion when a negative solution is derived.**