**Consumer Math Equations**

Listed below are four equations that you may need for your Module 3, Critical Thinking assignment. These are not easy to create in Word, and are given here for you to copy and paste into your document. The variables within these equations can be replaced with numeric values, as needed. This editing is much simpler than creating your own equation.

However, you can also create your own equations. Word’s equation editor can be found in the *Symbols* group of the *Insert* tab. Clicking the *Equation* button in the *Symbols* group will insert an equation box into your document.

After inserting an equation box (or clicking on an existing equation box), the *Equation Tools* Design tab will appear on the Ribbon. This tab contains symbols and structures that can be used to create equations. Two commonly used equation structures are the “empty-box” symbols found by clicking the *Fraction* or *Script* buttons in the *Structures* group.

**Simple Interest**

$$I=Prt$$

**Compound Interest**

$$A=P\left(1+\frac{r}{n}\right)^{nt}$$

**Annuity**

$$A=\frac{R\left[\left(1+\frac{r}{n}\right)^{nt}-1\right]}{\frac{r}{n}}$$

**Amortized Loan Payment**

$$R=\frac{P\left(\frac{r}{n}\right)}{1-\left(1+\frac{r}{n}\right)^{-nt}}$$