

## Equation Editor Exercise

### A. INTRODUCTION

Physics contains a large number of complex equations. Sometimes teachers will resort to writing more complex equations by hand, even when using a word processor to create the rest of the test. This might be so because the teacher is not familiar with the not infrequently embedded equation editor. Microsoft's Word program contains such an equation editor. In this exercise you will learn how to use the equation editor to create a number of complex equations common to more advanced physics courses. Nonetheless, the skills learned here can be used with the simpler, more frequently encounter equations of high school physics.

### B. PROCEDURE

1. Using a computer with a MS Word application, open a new document. Under the INSERT tab, select EQUATION (alternatively ^=). This will launch the Equation Editor program.
2. Using *Equation Editor*, prepare the following five physics equations:

$$L = \frac{N\Phi_m}{I}$$

$$\sigma = \sqrt{\frac{\Sigma(\bar{x} - x_i)^2}{N}}$$

$$g = \frac{4\pi^2 \ell}{T^2}$$

$$a = \frac{\Delta v}{\Delta t} = \frac{(v_f - v_o)}{t}$$

$$p = \frac{mv}{\sqrt{1 - v^2/c^2}}$$

3. Once these equations have been prepared in MS Word using Equation Editor, print them out.

### C. EVALUATION

The output from this project will be examined for accuracy. Equations must be exactly as shown above and must have been created using *Equation Editor* under MSWord.