ET 332a
Laboratory 1

Using Spreadsheets and Other Software Tools in Laboratory Calculations

Making Equations Using MS Equation Editor and Plotting Data Using MS Excel Spreadsheets

Lab 1 Equation Editor Practice Equations

1.) Reproduce the equation below with the subscripts changed to read "load".

$$Z_L = \sqrt{R_L^2 + X_L^2}$$

2.) Reproduce the equation below and change the resistor identifiers to R_3 and R_4.

$$R_{eq} = \frac{R_1 R_2}{R_1 + R_2}$$

3.) Reproduce the reluctance formula below and replace m with the correct Greek letter.

$$R = \frac{L}{mA}$$

4.) Reproduce the equation below and change right hand side from I to 3.

$$\frac{V_1}{R_1} - \frac{V_1 - V_2}{R_4} + \frac{V_3}{R_2} = I$$

5.) Reproduce the equation below and change the summation index from i to k.

$$y_{ave} = \frac{\sum_{i=1}^{N} x_i}{N}$$

6.) Reproduce the following formula and change the exponent on x to a 3.

$$\int_0^4 x^2 dx$$

7.) Reproduce the array below and change the 2 to a 4.

$$\begin{bmatrix} 1 & 2 & 3 \end{bmatrix}$$