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.

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

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.

\[ [1 \quad 2 \quad 3] \]