Problem Set #3

Engineering 104 - Fundamentals of Engineering Computing

Complete the following problems in Excel and include as part of the submission of the appropriate assignment. Your assignment file should include a proper heading, comments and have a clear organizational structure. Each problem in the combined assignment should have its own tab in a combined Excel workbook.

Excel, Lecture #3 Problems - Excel II (4 Points)

Problem 3.1 (4 Points)

Enter the following equations as formulas into your Assignment 2 Excel spreadsheet on a sheet named **Problem 3.1** and report the results. Please use the equations editor to display each equation in Excel as shown below. In some cases you may need to compute some intermediate ranges of values. This is to exercise operator precedence not significant digits but report your results in scientific notation with 2 digits after the decimal.

$$R = \sqrt{4.5^2 - 3.1^2} \tag{1}$$

$$Q = \cos^2\left(\frac{\pi}{4}\right) \tag{2}$$

$$T = \frac{1}{20} \sum_{i=1}^{20} i^2 \tag{3}$$

$$V = \frac{1 - \cos(\pi/4)}{3 \times 10^{-2}} \tag{4}$$