ENGR 0012 - Spring, 2017
Assignment 1
Due: January 12, 2017

Name ___________________________  Group # ____________

This is an individual Assignment. Each member of the group must complete the assignment. Using Matlab answer the following questions. It is suggested that you answer all the problems at the end of sections 4.4, 4.6, 4.7, and 4.8. Then record the solutions for the following questions:

1. What is (((4+3-2*4)/5)^2)+4/5^(2*3-4+7*2)/9

2. What is log_{10} (5) and ln (5)

3. What is 4^6 and e^6

4. Let θ = 56 radians and β = 56 degrees, what is sin(θ) and cos(β)

5. What is the value of 3.4, 4.6, -2.3 and -2.8 using the following functions: ceil(x), fix(x), floor(x), round(x)

6. Given x = [1 3 0 2] and y = 4, what is the result of x ^ y?

7. Given x = [1 3 0 2] and y = 4, what is the result of x .^ y?

8. Given x = [3 2; 1 0] and y = [1 2; 3 4], what is the result of max(x, y)?

9. The following information is in the variable data
Write the Matlab commands that will set the following 3 variables equal to the indicated portion of data:

\[ Y = \begin{bmatrix} 4 \\ 0 \\ 3 \end{bmatrix} \quad \text{Matlab Command: } Y= \]

\[ Z = \begin{bmatrix} 1 & 0 & 9 \\ 2 & 3 & 1 \end{bmatrix} \quad \text{Matlab Command: } Z= \]

\[ S = \begin{bmatrix} 2 & 3 & 1 \end{bmatrix} \quad \text{Matlab Command: } S= \]

What is \text{sum}(Z)?

What is \text{Y} \times \text{S}?

10. Given A, B and C, determine the result of the following.

\[ A = \begin{bmatrix} 2 & -1 & 3 \end{bmatrix} \]
\[ B = \begin{bmatrix} 3 & 5 & 2 \end{bmatrix} \]
\[ C = \begin{bmatrix} -2 \\ -5 \\ -1 \end{bmatrix} \]

\[ A \times C = \]

\[ A-B = \]

\[ 3\times A = \]
A. *B =

B. ^A =

B*C =

**Deliverable:**
Staple the individual assignments from each member of the group, and turn in the set. We will select one of them from the group and grade it. That grade will be the group grade.