

Reading

Textbook: *Numerical Methods for Engineers*, 7th Ed.
Steven C. Chapra & Raymond P. Canale
McGraw Hill

Assignment: Chapra – Read Chapters 1 and 2

Problem #1: Course Syllabus

I confirm that I have fully read and understand the course syllabus and all that it contains.

Signature

Problem #2: MATLAB Tutorial

Please watch the following tutorial video on using MATLAB. Sign the statement confirming you have watched the entire length of the video and understand its contents.

<http://www.mathworks.com/support/2014b/matlab/8.4/demos/GettingStartedwithMATLAB.html>

Statement

I confirm that I have watched the entire video above. Further, I confirm I understand the information and ready to apply the concepts to write programs in MATLAB.

Signature

Problem #3: Download and Read MATLAB Primer

Please read all of the tutorials at the link below, which introduces the basics of MATLAB.

<https://www.mathworks.com/help/matlab/getting-started-with-matlab.html>

Please read and understand everything in these tutorials and sign the statement confirming you have done so.

Statement

I confirm that I have read all of the tutorials at the link above. Further, I confirm that I understand the information and am ready to apply the concepts that it taught.

Signature

Problem #4: Arrays and Matrices

Enter the following matrices into MATLAB.

$$A = \begin{bmatrix} 1 & 2 & 3 \\ 2 & 0 & 1 \\ 1 & 3 & 2 \end{bmatrix} \quad B = \begin{bmatrix} 4 & 1 & 2 \\ 8 & 3 & 8 \\ 4 & 2 & 7 \end{bmatrix}$$

Part (a)

At the command prompt, calculate “>> A*B” and report the answer.

Part (b)

At the command prompt, calculate “>> A.*B” and report the answer.

Part (c)

At the command prompt, calculate “>> A^2” and report the answer.

Part (d)

At the command prompt, calculate “>> A.^2” and report the answer.

Part (e)

Is the answer to Part (a) the same as the answer to Part (b)? Why or why not?
Is the answer to Part (c) the same as the answer to Part (d)? Why or why not?