

Lab 0 Assignment

Due on May 15th on Blackboard by 5pm.

- (1) For the following problems start a diary and turn in the print out as well as the plot.
- (2) Let

$$A = \begin{pmatrix} 2 & 3 & 4 \\ 4 & 6 & 8 \\ 6 & 9 & 12 \end{pmatrix} \quad B = \begin{pmatrix} 4 & 1 & 6 \\ 7 & 2 & 7 \\ 3 & 0 & 9 \end{pmatrix}$$

- (a) Calculate AB .
- (b) Calculate A times B componentwise.
- (3) Let $f(x) = 2x + 1$, $g(x) = \sqrt{|x+1|}$, $h(x) = x^2$. Plot these using input values from -10 to 10 with 200 equally spaced points. All functions should be a different color and style (use the command "help plot" to find the plot options for different colors and styles.) Be sure to add a legend to your plot.

Please only printout the pertinent parts of the diary. I don't need to see all your mistakes. You can edit the diary after you double click on it. This will also save a lot of paper. Make sure your homework is *STAPLED* together with your name, section number, and lab number on the top of the front page.