Using MATLAB, we will create at least four different graphs to graph the lines and planes that are in our s12-5linesPlanes, $\# 10$ WeBWorK problem. Each of them will have the line, one of the planes, and if they intersect, the point of intersection. The view should be adjusted by using the view command to demonstrate parallel, perpendicular, etc. The domains of the line and/or plane may need to be adjusted to see what is going on and/or include the point of intersection. See the example that is found on the Shared MATLAB Drive. The same file is posted on Piazza.

When the line and plane is perpendicular or neither (thus they intersect), figure out the point the line intersects the plane. Show all work on paper. If you need calculations to help you, do them in MATLAB within the file. Graph the point of intersection as in the example file.

Publish your file as a PDF and upload both the PDF and original m-file by the due date/time.

## TIPS AND TRICKS

- If you need to get familiar with MATLAB, try their MATLAB Onramp tutorial. You don't need to do it all (see MATLAB page on class website).
- If you have your own machine, install MATLAB. If not, you can always use MATLAB Online. If you find using MATLAB Online to be slow or not working at all, go to the Math/Stat Computer lab (318 Knott Hall). MATLAB is installed on each of the machines so you don't have to go through the browswer. This lab is available (swipe card access) 24-7 other than when there are classes in there.
- Run each section to see if it works before publishing. This is faster than publishing, and allows you to experiment with the domains.
- If you have questions, copy/paste your code that isn't working in an email to me so I can run it myself and see what the issue is.

