

This folder contains MATLAB work regarding 3 different subfolders each with a different problem.

Folder 'Problem 2a' contains a code to take in a text file of an assortment of numbers and randomly picks one and prints it on MATLAB.

There are two subfolders in that, one regarding notes to the problem that were written down as it was being completed, and the other containing the problem and the text document needed to run.

Folder 'Problem 2b' contains code to take in a cylindrical cup of water and predict the time it will take to reach half of its initial water height with a given diameter at the bottom.

There are two subfolder, one containing the notes and docs I used to do the problem, and the other being the matlab files needed to complete the task and any supporting material that was used.

Folder 'Problem 2c' was very similar to 'Problem 2b', but the program is able to account for a slight tapered cup where the insert parameters can be changed within the script in the constant section. It also predicts the time to reach a $1/4$, $1/8$ and $1/16$ of its initial water level and print a picture showing these times in a pdf file containing a d

There are two subfolders in this file, like the others, containing a notes folder and the overall work folder to do the problem.