

MAT274 **Changes** of Homework 1

Due: Wed 9/1

Readings: §1.1, 1.3 – 1.5 of *Edwards & Penny*

Problem 2 of HW1 is changed with 3 revisions:

- The program to plot the slope field is changed from *Maple* to *Matlab*, partially due to the instability of the server that hosts Maple. To access University-licensed Matlab, you could use computers on Campus on which Matlab is installed or go to my.asu.edu, login with your ID and run Matlab under “myApps”. I would recommend you use a Matlab-ready computer because it runs a local copy rather than trying to compete for the hosting server.
- The Matlab command is `dfield8` which can be downloaded from math.rice.edu/~dfield. On the website, you will click on the correct link that is consistent with the version number of Matlab you are using. Doing so might give you a different number than 8 in the `dfield` filename and therefore the command you will be running in Matlab. After clicking on the correct link, save the text file with `.m` extension in a folder that you know where about. Lastly, when running `dfield` in Matlab, you may have to change the “current directory” to the one used for storing the `.m` file you downloaded.
- The initial condition is changed to $y(1) = 3$ for a more interesting plot. Also, in the graphic interface of `dfield`, you may set the range of x as $[-4, 4]$ and range of y as $[-10, 10]$.

Here is the corrected Problem 2 of HW1

2. Use the *Matlab* command `dfield8` to help sketch the slop field and *several* solutions of the previous problem. Then, indicate the curve of the particular solution that satisfies the given initial condition $y(1) = 3$.