

MATH.2720 Introduction to Programming with MATLAB
Homework on Two-Dimensional Plots, Part 2 (Due 3/1)

Please email me a script file containing the commands you used to answer these questions.

1. Plot the function $f(x) = \cos(x)$ for $-2\pi \leq x \leq 2\pi$ and mark the points $(0, 1)$, and $(\pi, -1)$ with circles.
2. Add symmetric error bars to the graph you just generated using error bars of half-width 0.2 and 0.3 for the two points.
3. Use the `fplot` command to graph the function $f(x) = \sin(\ln(x))$ for $1 \leq x \leq 10$.
4. Download the script file `temp_data.m` from the *Class Handouts* page on our course web site and run the file. This will generate a 181×1 array named `Temp`. Generate a histogram with 11 bins for the data in this array. Label the horizontal axis `Temperature (F)` and label the vertical axis `Number of Days`.

(This file contains the daily high temperature at UMass Lowell for the dates January 1, 2014, through June 30, 2014. The data come from Dr. Colby in the EEAS Department.)