Numerical Analysis, Spring 2023 Homework 2 due February 22nd

Please show your work. For the programming exercises also submit your MATLAB codes and outputs. (You can use the MATLAB function *diary* to copy your command window output.) Page http://academics.davidson.edu/math/chartier/Numerical/matlab.html contains MATLAB m-files mentioned in the problems, but you can (and are encouraged to) write your own routines.

All students:

Chapter 4: Exercises 2(b), 3, 5, 6, 11(a and c), 12; Chapter 5: Exercises 2 and 13.

MTH 464 students (in addition to the previous problems):

Chapter 4: Exercises 13 and 15; Chapter 5: Exercises 4 and 8.

Bonus problems for all:

Chapter 4: Exercise 9; Chapter 5: Exercise 3.