Math 20750
Spring, 2016

Assignment 4, due February 5

Reread §§2.3 and 2.6 in Polking, Boggess and Arnold and read §§2.7–2.9.

Do:
§2.3 #11,12,14,18
§2.6 #10,12,14,41   In #41(b) if you're *really* stuck trying to solve (6.43), here's a hint.
§2.7: #2,4,6,10,12,22,24,28 In #12, use **dfield** as your numerical solver. You'll want to use the keyboard input option.

Reread chapters 5-7 in *Differential Equations with MATLAB®*.

Do as a MATLAB group:
Problem Set B #7,15

Use a separate m-file for each problem. Staple the published solutions together in order. Make sure the names of all members of your MATLAB group are on MATLAB assignment before turning it in.

Hint, Problem Set B #7

If you're stuck on some parts, you might find it useful to look at the solution of problem 5.

Hints for Problem Set B #15

- You may want additional plots for part (c). For example, you might want to plot each level set on a separate plot. You will probably want to zoom in or do additional plots that show a smaller region to estimate the interval of uniqueness. Explain how you estimate it.

- You may also want to do the plot for a larger t interval.