Math 20750 Spring, 2016

## Assignment 14 due Wednesday, April 27

Read §§9.9 and 10.1–10.2 in Polking, Boggess and Arnold.

Do: §4.7 #10,26,35,39 if we get far enough Monday. Typo: the ODE in the instructions for #35 should be  $x'' + 2cx' + \omega_0^2 x = A \cos \omega t$ . §10.1 #1,3,6,9,11,14,17,20 §10.2 #3,7 §9.9 #6,12,15,17 if we get far enough by Monday, April 25

On §9.9 #6, compute  $\mathbf{v}'(t)$  by hand. After you do that, you can (and probably will want to) compute  $\mathbf{v}(t)$  and  $\mathbf{Y}(t)\mathbf{v}(t)$  using MATLAB or some other computer algebra system.

Reread chapters 14 and read chapter 15 in Differential Equations with MATLAB<sup>®</sup>.

Do as a MATLAB group: Problem Set F #5 On this problem do **not** use pplane.

## Hints for Problem Set F #5

- In (c) and (g) you will need to use the chain rule.
- Be sure to answer all of the questions in each part.