Math 20750
Spring, 2016

## Assignment 14 due Wednesday, April 27

Read $\S \S 9.9$ and 10.1-10.2 in Polking, Boggess and Arnold.
Do:
$\S 4.7 \# 10,26,35,39$ if we get far enough Monday. Typo: the ODE in the instructions for \#35 should be $x^{\prime \prime}+2 c x^{\prime}+\omega_{0}^{2} x=A \cos \omega t$.
§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 $\S 9.9 \# 6$, compute $\mathbf{v}^{\prime}(t)$ 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 ${ }^{\circledR}$.
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.

