

### Homework Set 8

Due Friday, October 19

- I. Do numbers 13 and 17 in section 3.6 by hand. Then plot the solutions with Maple. Put your name into the title of your graph. Neatly tape the graphs into your homework. Do not photocopy someone else's work.
- II. In 3.6, do # 29 by hand. Then solve it with Maple. Plot the Maple solution; you will need the command **piecewise**. Neatly tape the Maple part into your homework. Your name should be on typed in your Maple work.
- III. We revisit #18 in 3.5. Use Maple to solve  $9y'' + 12y' + 4y = 0$ , with  $y(0) = a$  and  $y'(0) = -1$ . My webpage has an example. Use the **animate** command to make a "movie" of solution plots for  $0 \leq t \leq 15$ , for  $0 \leq a \leq 5$ . Save your worksheet (edit it so it is easy to read) and e-mail it to me, (msulliva@math.iu.edu) or export it as a webpage, post it on your webpage, and e-mail the URL address to me.