Math 307 - Homework 5a - Dr. Loveless
DUE Never

This short assignment will not be graded, but you are expected to complete this assignment and know this material before midterm 2. This material **can** be included on the second midterm.

As always, this is a minimal list of problems, I strongly encourage you to do more problems than are assigned. I suggest you start with the old exam problems, then do the problems from 3.8.

1. 3.8/5, 7, 8, 16, 17, 18

2. Do these old exam problem (pertaining to 3.7 and 3.8):

   (a) Do problems 1, 2, and 3 from the Spring 2015 (Loveless) Midterm 2.
   (b) Do problem 4 from the Winter 2013 (Erickson) Midterm 2.
   (c) Do problems 4 and 5 from the Summer 2013 (Sarantsev) Midterm 2.
   (d) Do problem 6 from Fall 2001 (Palmieri) Midterm 2.

NOTES AND SPECIAL INSTRUCTIONS :

1. On 3.8/7(b): use a graphing device to see the graph and make a rough sketch.

2. On 3.8/8: Just a warning, the coefficients you find (both for the particular solution and for the initial conditions) are a little messy to write as fractions, so go ahead and write your numbers as decimals if you like. Also, you should be able to make a rough sketch here without a graphing device (since you can find the amplitude and period). Also, the answer in the back of the book has one coefficient incorrect.

3. On 3.8/16: The forcing function is a constant $E(t) = 12$, so this is just another chance to practice solving a nonhomogeneous equation (in other words, practice the undetermined coefficients method).