Due: Friday October 8. Hand it in during recitation or in the mailbox of your TA by 4pm on Friday.

**Core Problems:**  
Section 8.1, No. 3, 12, 13, 15, 18, 23, 28, 33, 36, 38  
Section 8.2, No. 5, 7, 9, 20.

**Additional Problems:**  
Section 8.1, No. 21, 27, 30, 40  
Section 8.2, No. 2, 6, 8, 10, 14, 16

In spite of the midterm next week Thursday, this homework is due on Friday since sections 8.1 and 8.2 will be on the midterm. You only really learn when you have to write it down.

**Midterm**  
The midterm will be Thursday October 7, 10:30-11:50 in Meyersen B1. I suggest to make sure ahead of time that you know where the room is. We will start the exam at 10:30, come a few minutes early.  
Some of you have an exam 9-10:20. In that case don’t worry about coming late. The front row will be reserved for students in that situation and will be given extra time at the end.

The exam will cover 3.1, 3.3, 3.4, 3.6, 3.8, 8.1, and 8.2, which I finished today. Notice that in Chapter 3 I did not cover everything in the sections that are on the syllabus. E.g. no Wronskian or higher order equations, and no boundary value problems. Linear independence only very lightly (mainly for 2 functions). For spring problems you do NOT have to understand units or unit conversion since I do not expect you to know physics. But after I give you, for example, the value of m,k,and c or the right hand side F(t), you should be able to do the mathematics that answers questions like, what is the period, frequency, amplitude, damping, graph etc, as in the homework problems.

**Office Hour**  
I will extend my office hour next week Tuesday from 12-3. My office is DRL 3E3A. You can go to any of the office hours that I and the TA’s have next week, even if it is not your own TA.

You should do the following past Final Exam problems as part of the preparation for the midterm. Just doing these problems may not be enough though. Also look at the problems on your homework assignments again.

**Past Final Exam Problems:**  
I will add Final Exam problems and/or other practice problems for the midterm by Friday night (not to be turned in).

**To be covered next week:**  
8.3, 8.4