

**Review Problems for Exam # 1**  
**Math 352 - Spring 2003**  
**Prof. John A. Pelesko**

Below are a set of practice problems to help you prepare for the first exam. While you should be able to do all of these problems, your ability to do problems should not be limited to those on this handout.

1. Section 5.2 from your text, problem's 7,8,9,11.
2. Section 5.3 from your text, problem's 1,3,10.
3. Section 5.4 from your text, problem's 1,5.
4. Section 5.5 from your text, problem's 1.
5. Section 5.6 from your text, problem's 1.
6. Section 5.7 from your text, problem's 1,6.
7. State the divergence theorem.
8. Section 16.3 from your text, problem's 1,3.
9. Section 16.4 from your text, problem's 4.
10. Section 16.5 from your text, problem's 1.
11. State the definition of the Laplace transform.
12. Solve for  $y$  the integral equation  $y(x) = 1 - \int_0^x (x-t)y(t)dt$ .