

**Review Problems for Exam # 2**  
**Math 352 - Spring 2003**  
**Prof. John A. Pelesko**

Below are a set of practice problems to help you prepare for the second 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 16.4 from your text, problem 4.
2. Section 16.6 from your text, problem's 4,10.
3. Section 16.7 from your text, problem 6.
4. Section 18.3 from your text, problem's 9,13,14.
5. Section 18.4 from your text, problem 14.
6. Section 20.2 from your text, problem's 1a,b,c,k,l,m,n.
7. Section 17.3 from your text, problem 4.
8. Consider  $f(x) = x$  on the interval  $[0, \pi]$ . Define the odd periodic extension of  $f$  and compute its Fourier sine series.
9. Consider  $f(x) = x$  on the interval  $[0, \pi]$ . Define the even periodic extension of  $f$  and compute its Fourier cosine series.