

Assignment #8

No quiz during Week 8.

Homework assignment #8 is due in lecture Friday, May 26. Be sure to try these problems before your discussion section!

Notice that page 358 is misprinted. You should have an inserted corrected page, but if you don't, look on the class web page for a link to the corrected page. The key point is the Fourier series for a function f with period 2π :

$$\frac{a_0}{2} + \sum_{n=1}^{\infty} a_n \cos nx + b_n \sin nx,$$

where a_n and b_n are found from f as in (4) on p. 360. You may need to review integration by parts.

(Of course, the hope is that the Fourier series for f sums to $f(x)$, which it does in most examples. See Theorem 2.)

section	page	To do but not hand in	To hand in
§6.1	p. 366	1, 3, 7, 9, 15, 17, 19	2, 4, 6, 8, 14, 20, 22