Physics 360/Math 360 MWF 11:00 - 11:50 PM, Room: CST 225

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Assignment 5, Due Friday March 10th

1 Boas §7.8 Other Intervals

Do problem 7.8.9. Compare it with 7.5.9 from before.

2 Boas §7.9 Even and Odd functions

The example that starts on page 367 is excellent. It shows expanding a given function as a Fourier sine series, a Fourier cosine series, and a Fourier series (that last one is typically taken to mean that you have both sine and cosine terms, or that you use the complex exponential version of Fourier series).

2.1

Read through that example, and then do problem §7.9.15. Please note that Boas gives you the answer so that you can check your work!

Expand $\sin(x)$ in a cos series, or $\cos(x)$ in a sin series.

Also do 7.9.6, 7.9.23, and 7.9.24.

3 Parseval

Problem 7.11.5