

## MATH 241 — HOMEWORK 7.

due on Friday, October 23.

**Textbook:** “*Applied Partial Differential Equations with Fourier Series and Boundary Value Problems*”, fifth edition  
by Richard Haberman

**Topics:**

- Chapter 4. Wave Equation: Vibrating Strings and Membranes
  - 4.2 Derivation of a Vertically Vibrating String
  - 4.4 Vibrating Strings with Fixed Ends
  - 4.5 Vibrating Membrane

**Seventh Homework Assignment.**

***Reading:***

- Read Section 4.2, 4.4 and 4.5 from the book.
- Read your notes.

***Exercises: Problems:***

- Page 133: problems: 4.2.1,
- Page 140: problems: 4.4.1, 4.4.3 (b), 4.4.4