

MATH 241 — HOMEWORK 11.

due on Friday, November 20.

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

Topics:

- Chapter 7. Higher-Dimensional Partial Differential Equations
 - 7.9 Laplace’s Equation in a Circular Cylinder
 - * 7.9.2 Separation of Variables
 - * 7.9.3 Zero Temperature on the Lateral Sides and on the Bottom or Top
 - * 7.9.4 Zero Temperature on the Top and Bottom
 - * 7.9.5 Modified Bessel Functions.
 - 7.10 Spherical Problems and Legendre Polynomials

Eleventh Homework Assignment.

Reading:

- Read Section 7.9 and 7.10 from the book. Start reviewing for the Midterm.

Exercises: Problems:

- Page 338: problems: 7.10.1 (e)(f), 7.10.2 (c), 7.10.8, 7.10.13