MATH 360 — HOMEWORK 9.

due on Friday, November 9.

by J. E. Marsden and M. J. Hoffman

Additional Reading: “Foundations of Modern Analysis”
by J. Dieudonné

Topics:

• Compact and Connected Sets
  – 3.1 Compactness
  – 3.2 The Heine-Borel Theorem
  – 3.3 Nested Set Property
  – 3.4 Path-Connected Sets
  – 3.5 Connected Sets

Ninth Homework Assignment.

Reading:

• Read Sections 3.4 and 3.5 paying attention to all the examples.

Exercises:

• Page 159: problems: 1, 3, 4
• Page 164: problems: 1, 2, 4
• Page 172: problems: 1 -just the second question.- 3, 6, 10, 15, 35, 39

The topics and page numbers are from the textbook.