MA2108 Advanced Calculus II

Relevant Sections and Suggested Exercises
from Bartle and Sherbert’s book

Here is a list of and relevant sections and suggested exercises from Bartle and Sherbert’s book. The tutorial numbers inside the brackets correspond roughly to the topics covered in the corresponding tutorial sheets. The tutorial numbers inside the brackets correspond roughly to the topics covered in the corresponding tutorial sheets. Hints and/or Suggested Answers to these exercises are given at the end of the book.

Chapter 1: Sequences of Real Numbers

Section 3.1, page 59-60, Questions 1, 3, 5, 6, 9, 11, 13, 15 (Tutorial 1)
Section 3.6, page 88, Questions 3, 8, 9 (Tutorial 1)
Section 3.2, page 67-68, Questions 1, 3, 6, 8, 9, 11, 13, 15, 18, 20, 21, 22, 23 (Tutorial 2)
Section 2.3, page 38, Questions 1, 2, 3, 4, 6, 9, 11 (Tutorial 3)
Section 2.4, page 43-44, Questions 1, 2, 4, 5, 7, 9, 11, 13, 14 (Tutorial 3)
Section 3.3, page 74-75, Questions 1, 2, 3, 4, 5, 7, 10, 11, 13, 14, 15, 16, 17 (Tutorial 3)
Section 3.4, page 80, Questions 1, 3, 7, 8, 12, 13, 14 (Tutorial 4)
Section 3.5, page 86, Questions 1, 3, 5, 8 (Tutorial 4)

Chapter 2: Series of Real Numbers

Section 3.7, page 95, Questions 1, 3, 6, 7, 9, 11 (Tutorial 5)
Section 9.1, page 256, Questions 1, 3, 5, 6, 9, 11, 13 (Tutorial 5-6)
Section 9.2 (excluding Raabe’s Test), page 262, Questions 1, 2, 3, 4, 6, 7(a), (b), (c), 8, 14 (Tutorial 6)
Section 9.3 (excluding Dirichlet’s and Abel’s test), page 265, Questions 1, 2, 7, 8 (Tutorial 7)

Chapter 3: Sequence and Series of Functions

Section 8.1, page 232, Questions 1, 3, 5, 7, 9, 10, 14, 15, 18, 20 (Tutorial 7-8)
Section 8.2 (excluding Dini’s Theorem and Bounded Convergence Theorem), page 238, Questions 1, 4, 6, 7, 8, 10, 20 (Tutorial 8-9)
Section 9.4, page 272, Questions 1, 4, 5, 6, 8, 10, 16, 19 (Tutorials 8-10)
Section 6.4, page 191, Questions 4, 5, 6, 7, 8, 9, 10, 11, 12, 13 (Tutorial 10)