MAT 319 – Chapter 6 Study Guide

Know the precise statements of the following major results:

- Definitions of convergent and divergent series (page 255)
- Sum of a geometric series (page 257)
- Proposition 6.3 (page 260)
- Ratio Test (page 270)
- Root Test (page 272)
- Proposition 6.8 (page 274)
- Definition of "absolute convergence" and "conditional convergence (page 276)
- Absolute convergence implies convergence, but not vice versa (page 276)
- Alternating Series Test (page 278)
- p-test (page 327)
- chart (page 331)

Know the proofs of the following results:

- Proposition 6.1 (page 258)
- Proposition 6.2 (page 259)
- Proposition 6.4 (page 262)
- Proposition 6.5 (page 263)
- Integral Test (page 326)
- Limit Comparison Test (page 329)

Know how to do the following exercises:

- 3 (page 260)
- 4 (page 262)
- 10(a)(b)(c) (pages 280-281)
- 23 (page 328)
- 25, 26, 27, 28 (pages 333-334)