# Math1220 Midterm 3 Review Problems
## Summer, 2010
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Chapter 9 Review (pg 504-507)
    Concepts Test Problems #1, 3, 6, 7, 9, 13, 14, 21, 26, 28, 30
    Sample Test Problems #1-43 odd, 14, 24, 28, 30, 34, 40, 44

The exam covers sections 9.1-9.7.

You can bring one 8.5 x 11 inch paper of notes (on both sides, if you want) to use as a reference. I would recommend that you bring the series' test flow chart as that paper, with whatever else you think you'll need written on the back side.

## Topics:

- Convergent/Divergent Sequences
  - take limit as n goes to infinity of nth term of sequence
  - squeeze theorem
  - is it monotonic and bounded?
- Absolutely Convergent/Conditionally Convergent/Divergent Infinite Series
  - nth term test for divergence
  - geometric series
  - p-series
  - ratio test (RT)
  - integral test (IT)
  - ordinary comparison test (OCT)
  - limit comparison test (LCT)
  - argument by partial sums
  - alternating series test (AST)
  - absolute ratio test (ART)
- Power Series
  - basic (given) power series
  - algebraic or calculus manipulation of those given power series
  - radius of convergence