

Math 1220 Midterm 2 Review Problems
Kelly MacArthur

Chapter 7 Review (pg 419-421)

Concepts Test Problems #11, 12, 14, 17-20

Sample Test Problems #7, 11, 13, 33, 35, 37, 41, 43

Chapter 8 Review (pg 446-447)

Concepts Test Problems #1-17 all, 19

Sample Test Problems #1-25 odd, 29, 33, 35

Chapter 9 Review (pg 505-506)

Sample Test Problems #1-31 odd

The exam covers sections 7.4 through 9.4.

You can bring one 8 ½ by 11 inch paper (on both sides, if you want) to use as a reference. No calculator is needed nor allowed.

Topics:

- Integration
 - trigonometric substitutions
 - partial fraction decomposition
 - involving square root of linear polynomials

- Indeterminate Limits (L'Hopital's Rule)
- Improper Integrals
- Infinite sequences
- Infinite Series (converge or diverge)
 - geometric series
 - p-series
 - comparison tests
 - integral test
 - ratio test
 - nth term test for divergence
 - definition of convergence (using partial sums)