

REVIEW FOR 136.275 TEST 1, November 15, 2004

Chapters 10 (10.2-10.10), 12(12.7) and 13 (13.1 and part of 13.2) from Anton

DEFINITIONS:

- 10. Sequence, limit of a sequence, convergent series, geometric series, p-series, absolute and conditional convergence, Taylor series, radius and interval of convergence, Lagrange form of the n-th remainder.
- 12.7. Quadric surface (types), trace.
- 13. Limit (of a vector valued function), continuity.

THEOREMS:

- 10. Squeeze theorem, thm. (lemma) on monotonic bounded sequences, divergence test thm., integral test, comparison, ratio and root tests, alternating series test thm., Remainder thm. on power series representation of functions, thm. on differentiation and integration of power series.
(and series expansions of $1/(1-x)$, e^x , $\sin x$, $\cos x$ and $\ln(1+x)$.)
- 13. Thm. on continuity of a vector valued function.