O. Sections covered: 28-34, 36.

I. (10%) Know basic definitions.

II. (40%) Computational problems and shorts proofs. Examples: find derivative from the definition, find derivatives using rules, find integrals using rules, find limits with L'Hospital's rule, find Taylor polynomials, Taylor series and radii of convergence.

III. (60%) I'll give you five of the following and ask you to do three of them.

a. Prove 28.2

b. Prove 28.3(iii) [product rule]

c. Prove 29.1

d. Prove 29.2 [Rolle's Thm]

e. Prove 32.10

f. Prove 33.9

g. Show that $\int_0^1 x^2\,dx = 1/3$ using either Darboux or Reimann defintions of the integral. (It will be your choice.)