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 definitions of the integral. (It will be your choice.)