Terms to know

Disclaimer: This is not an authoritative document to base your prelim studying on! I simply scanned through the chapters that we have covered and recorded the topics I saw. This is primarily intended to help you think of good questions during in-class review time.

§3.3 - §3.11

differentiation rules: sum, product, $e^x$, quotient
instantaneous rate of change
velocity, speed, acceleration, jerk
derivatives of trig function
implicitly defined function
 derivative of inverse
derivatives of inverse trig functions
standard linear approximation
differential
differential as sensitivity to change

nth derivative
1D motion
marginals
Chain Rule
implicit differentiation
derivative of log
related rates
linearization
estimating with differentials

§4.1 - §4.4

absolute (global) minimum / maximum
local minimum / maximum
Extreme Value Theorem
critical point
Rolle’s Theorem
increasing / decreasing functions
First Derivative Test
concavity
sketching a graph from derivatives

extreme values
relative (local) extrema
First Derivative Theorem
endpoint
Mean Value Theorem
Second Derivative Test
point of inflection