Here are topics that you should be familiar with/review as necessary. They will prove useful during 152 and 153.

- Definition of a function

- Limits notation; limits involving infinity

- Continuity of functions

  1. Visual
  2. Limits definition
  3. Epsilon-Delta definition

- What is a derivative

  1. function
  2. limit
  3. number
  4. instantaneous rate of change
  5. slope of tangent line
  6. velocity

- Linearity of differentiation (all calculus is linear)

- Review rules of differentiation

- Composition of functions

  1. Domain and range
  2. units
  3. which derivative rule applies?

- Implicit differentiation/Differentials
  A differential is a derivative represented as multiplication.

- Mean Value Theorem

- L'Hôpital's rule

- How are a function f and its derivative f' related?

- Antiderivatives

  1. Any two antiderivatives differ by a constant
  2. Antidifferentiation is linear
  3. Finding position from velocity and acceleration
     $v_0 = -6cm; s_0 = 9cm; a(t) = 6t + 4$. What is position at time t?
     Check initial conditions by plugging in 0.