Summary_ Lecture 2

- **Acceleration**
  \[ a = \frac{v - v_o}{t} \]
  
  Acceleration is change in velocity over change in time

- **Uniformly Accelerated Motion**
  
  \[ a = \text{constant} \]
  \[ v_o = \text{velocity at } t = 0 \]
  \[ x_o = \text{position at } t = 0 \]

  \[ x = x_o + v_o \cdot t + \frac{a}{2} t^2 \]
  \[ v = v_o + a \cdot t \]
  \[ \bar{v} = \frac{(v + v_o)}{2} \]
  \[ v^2 = v_o^2 + 2a (x - x_o) \]

- **We will use these equations a lot**