Day 1
Go To Class
- What is Calculus 3 about?
  - Calc I in 3 –D
  - Vectors
  - *You Try It*
    Write a sentence in your own words describing to your friend who has forgotten all of Calculus I, the meaning of *derivative.*
    Link to Discussion
- Examples of functions with more than one variable
  - Temp= T(lat, long. Time)
  - Salary = S(education, experience)
  - Volume cylinder = V(radius, height)
  - Show some tables, contours, temp map
  - Beef Consumption Table
    - C(3.50,80) = ?
    - Write a sentence
    - Increasing/decreasing functions- holding a variable constant
- 3-D coordinate system
  - Intro to 3-D room model
      A Note on this video
  - Some Examples
    1. Which axis is the point (0,4,0) on?
    2. Which plane is the point (-2,3,0) in?
    3. Which plane is the point (0,-2,4) in?
    4. What is the x – coordinate for every point in the yz plane?
    5. What is the equation of the yz plane?
    6. What is the equation of the xy plane?
    7. Is the point (3,-2,4) located
        a. above or below the xy- plane?
        b. in back of or in front of the xz-plane?
        c. in back of or in front of the yz-plane?
  - You Try It
    1. How far is the point (2,5,4) from the xy-plane?
    2. Give the coordinates of any point on the z – axis.
    3. Give the coordinates of any point on the xz-plane.
    4. Give the coordinates of any point on the plane x = 4.
        Video Answers
  - How to plot points so they look like they are in 3-D
  - Free 3 – D grapher