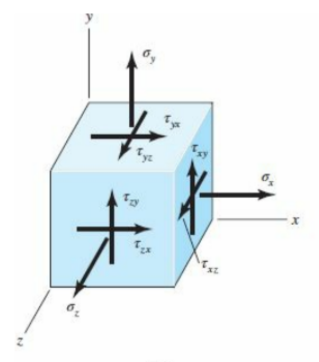
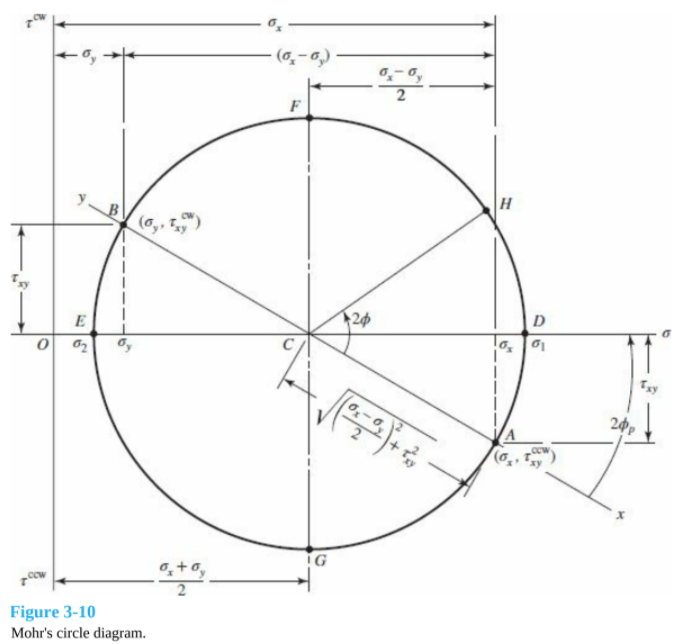
# Section 3.4: Stress

* + We have normal stress and tangential shear stress

# Section 3.5: Cartesian Stress Components

* + 
  + In order to keep equilibrium

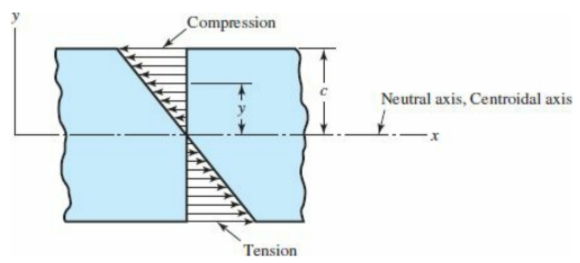
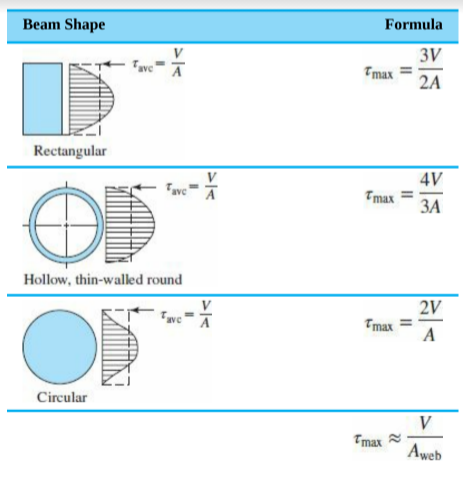
# Section 3.6 Mohr’s Circle for Plane Stress (one face is )

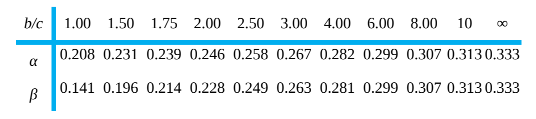
* + Center
  + Radius
  + Principle stresses:
    - Max stress: Center + Radius
    - Center - Radius
    - Radius
  + is a rotation of the element in the real world
    - rotation on mohr circle is in real world
    - is rotation to get to max shear
    - is rotation to get to principal stress plane
  + 

# Section 3.8: Elastic Strain

* + Hooke's Law
  + Poisson’s ratio
    - * Negative because positive tension causes swishing in other axis
    - If stress in all three planes

# Section 3.10: Normal stresses for beams in bending

* + 
  + 
* Shear stresses for beams in bending
  + Transverse shear stress from the vertical shear force

    - Max shear stress occurs along the neutral axis
    - For a rectangular cross section:
    - Last one in the table is for thin-walled I beams
  + Remember to do a mohr’s circle to find true maxes based off of element rotation
    - 

# Section 3.12: Torsion

* + Circular cross section
  + Rectangular cross section (), is longest side