

ME 323: Mechanics of Materials
Summer 2023

Homework Set H15
Assigned/Due: June 28/July 2

Consider the shear force/bending moment diagrams for the beam shown below. The beam has a cross-section as shown to the right, with $b = 0.2$ ft.

- Determine the location Y_O of the centroid O of the beam cross-section and the second area moment I_O about the neutral axis, z .
- Determine the maximum magnitude normal stress along section AB of the beam.
- Determine the shear stress at the neutral axis along section BC of the beam.

