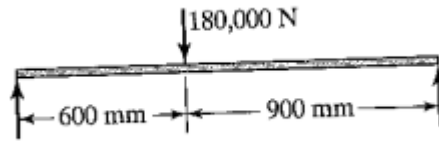
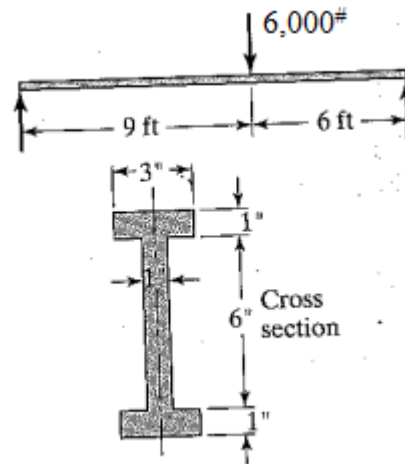


Homework# 3: MET 301

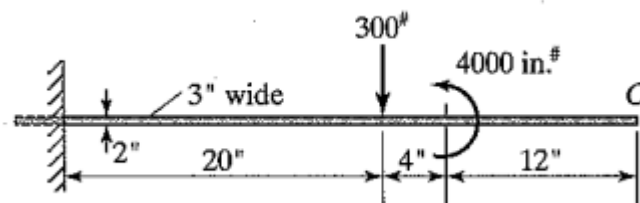
1. Compute the values of the transverse shear stress at point 40, 60, and 100 mm below the top surface of the beam for the cross sections to the left of the load. The beam is 150 mm wide and 200 mm deep. Ans: $\tau=5.4$ MPa for 100mm. [Hint: For shear force, see Fig I-14#7].



2. Find the maximum transverse shear stress for the beam in the following figure. Ans. $\tau= 585$ psi.



3. Find the deflection at the end C of the beam. $E=1,600,000$ psi. Ans. $y_c = 0.17$ in., up.



4. The two bearings that is supporting shaft can be considered as simple supports. Find the deflection at point A.

