



Answer as much as you can

1- Find the straining actions at section B-B for structure shown in Fig. (1)

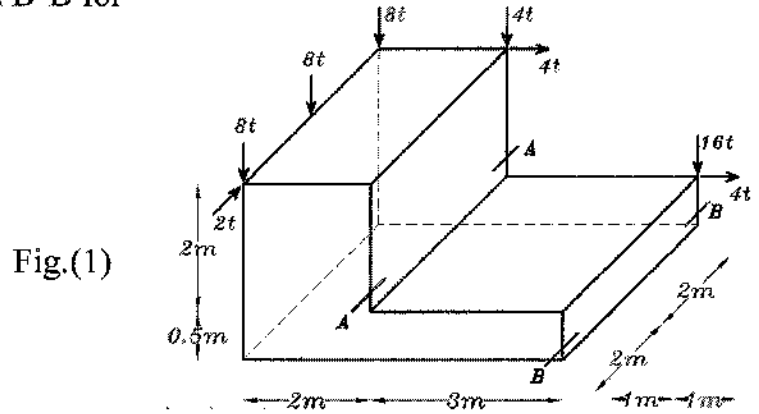


Fig.(1)

2- Locate the neutral axis and plot the normal stress distribution across the cross section shown in Fig.(2).

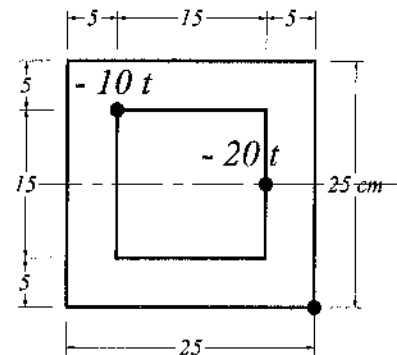


Fig.(2)

3- For the cross-section shown in Fig. (3), plot the shear stress distribution indicating the value and position of the maximum shear stress.

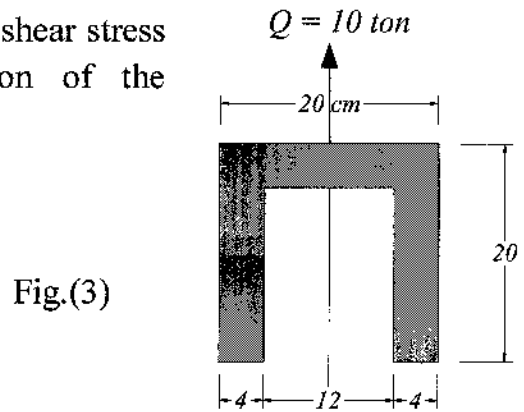


Fig.(3)

4- Determine the slope and the deflection at the free end of the cantilever beam shown in Fig.(4) using the double integration method.

$(EI = 10000 m^2t)$

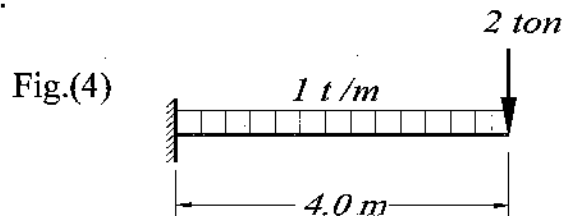


Fig.(4)