

## Tutorial Sheet #2

Assigned on Thursday, Aug 06

1. For the uniform beam  $ABC$  (**Figure 1**), draw the BMD, SFD, and approximate deflected shape, when support  $B$  settles by **80 mm**. Also find the rotation and displacement at point  $C$ .  $E = 200 \text{ GPa}$ ,  $I = 100 \times 10^{-6} \text{ m}^4$ .

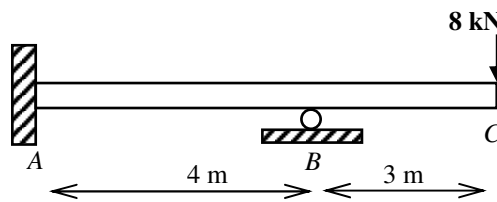


Figure 1

2. Draw the BMD and the approximate deflected shape for the frame systems shown in **Figures 2 and 3**. Assume same  $EI$  for all the members and neglect axial deformation.

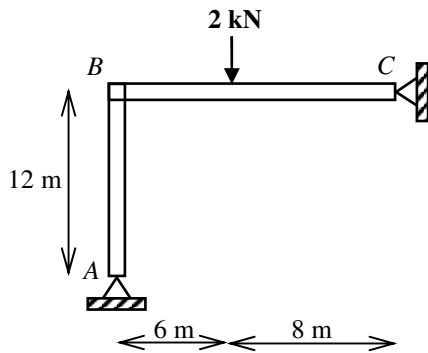


Figure 2

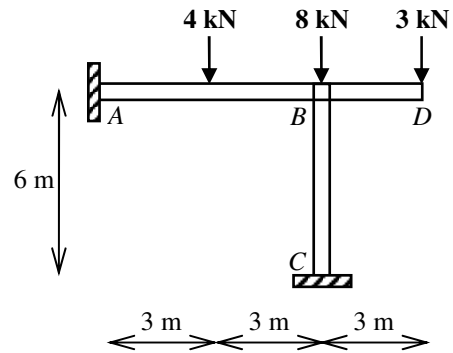


Figure 3