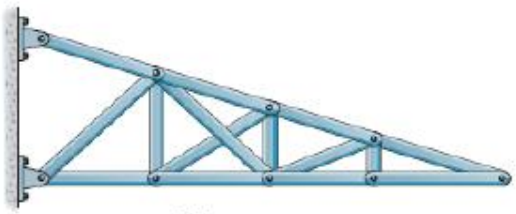
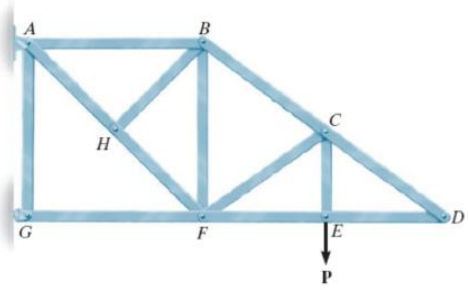
Q1) Classify each of the trusses as stable, unstable, statically determinate or statically indeterminate. The trusses are subjected to arbitrary external loadings that are assumed to be known & can act anywhere on the trusses.

(a)

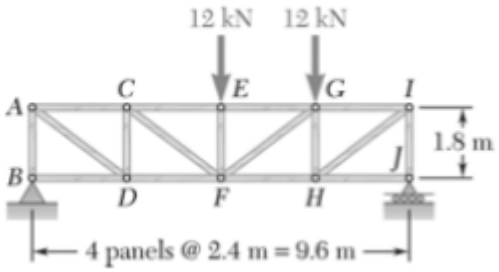


(b)

Q2) Using method of joints, indicate all the members that have zero force

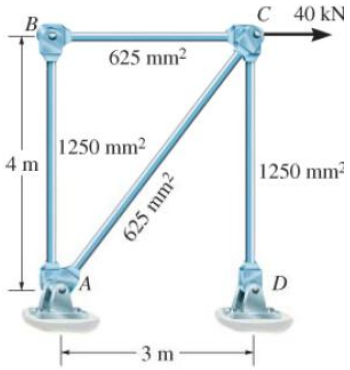


Q3) Determine the force in members FG and FH of the truss shown



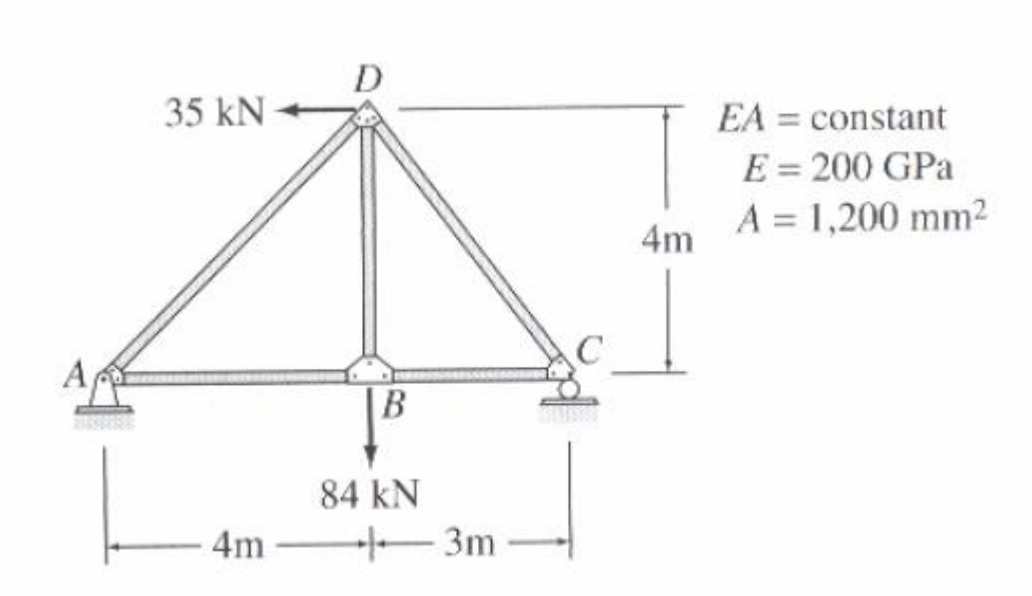
$F_{FG} = 5.00$ kN T $F_{FH} = 20.0$ kN T

Q5) Determine the horizontal displacement of joint *C* of steel truss shown. The x-sectional area of each member is also indicated. Take *E*st = 210X10^3 N/mm2

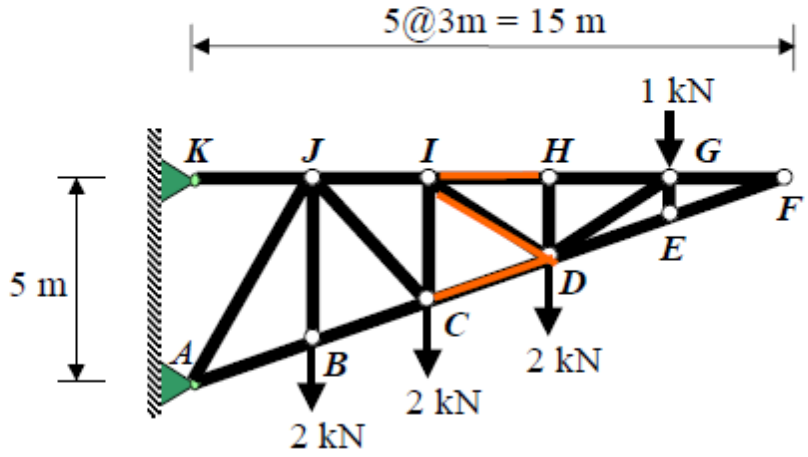


$\Delta_{Ch} = -7.5 \text{ mm} = 7.5 \text{ mm} \leftarrow$

Q6) Determine vertical and horizontal deflections at the point B of the truss.



- Determine member force *CD*, ID, and *IH*



F_{HI} = 1.5 kN (T) F_{DI} = 3 kN (T) F_{DC} = -4.25 kN (C)