

$$\sum \rightarrow : 0 \quad A_x - \frac{\sqrt{3}}{2}P = 0 \quad \therefore A_x = \frac{\sqrt{3}}{2}P \quad Q1$$

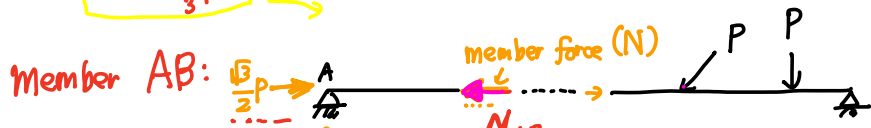
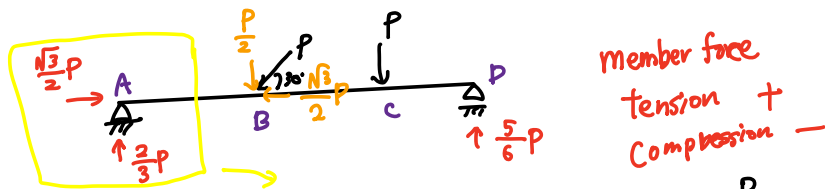
$$\sum \uparrow : 0 \quad A_y - \frac{P}{2} - P + D_y = 0$$

$$\sum M_A : 0 \quad -\frac{P}{2} \cdot \frac{l}{3} - P \cdot \frac{2l}{3} + D_y \cdot l = 0$$

$$D_y \cdot l = \frac{P \cdot l}{6} + \frac{2Pl}{3} \quad Q3$$

$$D_y = \frac{5Pl}{6} \cdot \frac{1}{l} \quad \therefore D_y = \frac{5}{6}P$$

$$A_y = \frac{3}{2}P - \frac{5}{6}P = \frac{4}{6}P = \frac{2}{3}P \quad \therefore A_y = \frac{2}{3}P$$



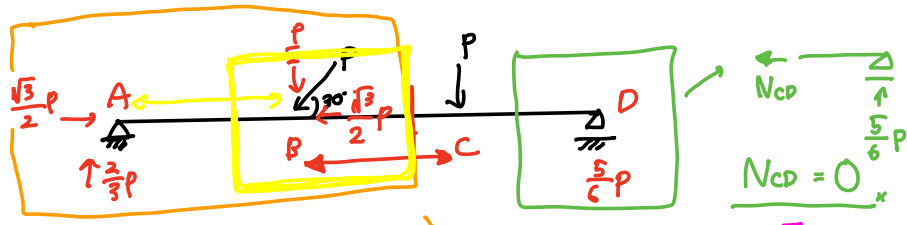
$$\sum \rightarrow : 0 \quad \frac{\sqrt{3}}{2}P - N_{AB} = 0 \quad \frac{\sqrt{3}}{2}P + N_{AB} = 0$$

$$N_{AB} = -\frac{\sqrt{3}}{2}P$$

$$N_{AB} = \frac{\sqrt{3}}{2}P \quad (\text{compression force})$$

$$= \ominus \frac{\sqrt{3}}{2}P$$

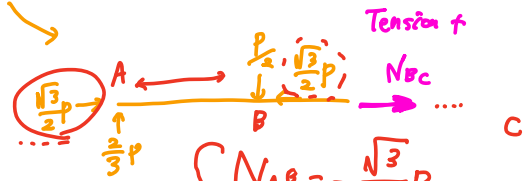
$$\frac{-1 \sqrt{3}^3 P}{3 \cdot 2} \quad \frac{1}{2}$$



Member BC :  $N_{BC}$

$$\frac{\sqrt{3}}{2}P - \frac{\sqrt{3}}{2}P + N_{BC} = 0$$

$$N_{BC} = 0$$



$$\begin{cases} N_{AB} = -\frac{\sqrt{3}}{2}P \\ N_{BC} = 0 \\ N_{CD} = 0 \end{cases}$$

