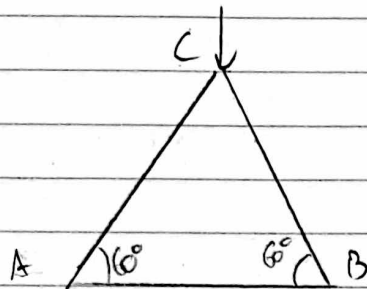


Solutions: 21-5-6.3-MK-01.png

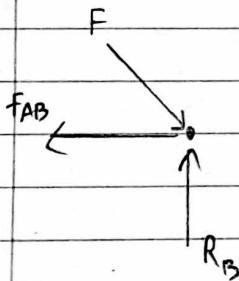


$$\begin{aligned} \text{max } T &= 3 \text{ kN} \\ \text{max } C &= 4 \text{ kN} \end{aligned}$$

at point C

$$\begin{aligned} \sum F_y &= 2F \sin 60 - P \quad f \text{ is compression assume } F = 3 \text{ kN} \\ &= 2(4 \text{ kN})(\sin 60) = (P = 6.928 \text{ kN}) \end{aligned}$$

@ point B



$$\sum F_x = F_{AB} - \cos 60 \left( \frac{P}{2 \sin 60} \right) \Rightarrow F_{AB} \text{ is tension} \therefore F_{AB} = 4 \text{ kN}$$

$$\frac{4 \text{ kN} \times \sin 60}{\cos 60} = (P = 6.928)$$

6.928 kN is least thus  $(P = 6.928 \text{ kN})$