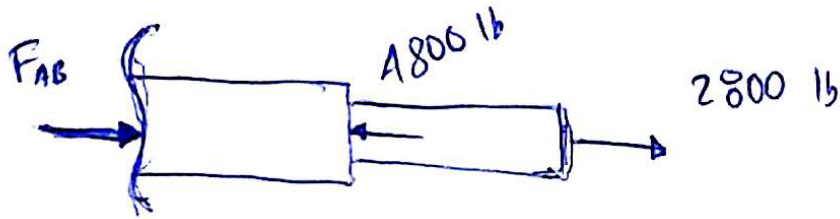


$$\textcircled{3} \quad A_{AB} = \frac{\pi}{4} (1.5^2 - 1.25^2) = 0.54 \text{ in}^2 \quad \left\{ \begin{array}{l} E = 30 \times 10^6 \text{ psi} \\ A_{BC} = \frac{\pi}{4} (0.75^2) = 0.44 \text{ in}^2 \end{array} \right.$$

Seccionando AB



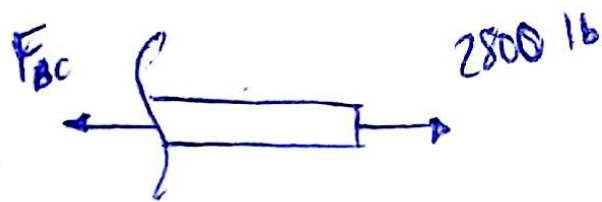
$$F_{AB} = 2800 - 4800$$

$$F_{AB} = -2000 \text{ lb}$$

$$\sigma_{AB} = \frac{F_{AB}}{A_{AB}} = - \frac{2000}{0.54} = -3703.7 \text{ lb/in}^2$$

$$\epsilon_{AB} = \frac{\sigma_{AB}}{E} = - \frac{3703.7}{30 \times 10^6} = -123 \mu$$

Seccionando BC



$$F_{BC} = 2800 \text{ lb}$$

$$\sigma_{BC} = \frac{F_{BC}}{A_{BC}} = \frac{2800}{0.44} = 6363.6 \text{ lb/in}^2$$

$$\epsilon_{BC} = \frac{\sigma_{BC}}{E} = 212 \mu$$