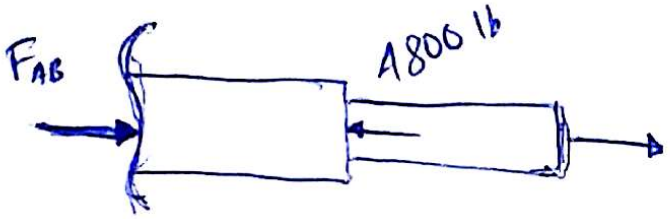
③ $A_{AB} = \frac{\pi}{4}(1.5^2 - 1.25^2) \simeq 0.54\ in^2$

$A_{BC} = \frac{\pi}{4}(0.75^2) = 0.44\ in^2$

$E = 30 \times 10^6\ psi$

Seccionando AB



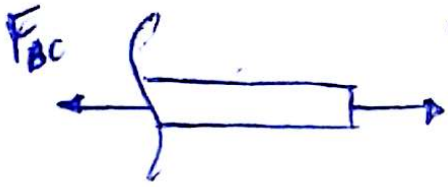
$F_{AB} = 2800 - 4800$

$F_{AB} = -2000\ lb$

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

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

Seccionando BC



$F_{BC} = 2800\ lb$

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

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