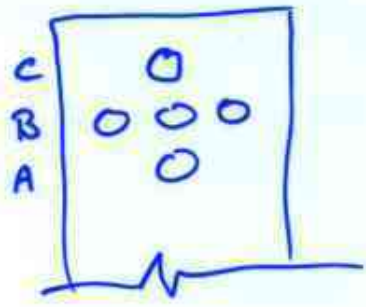
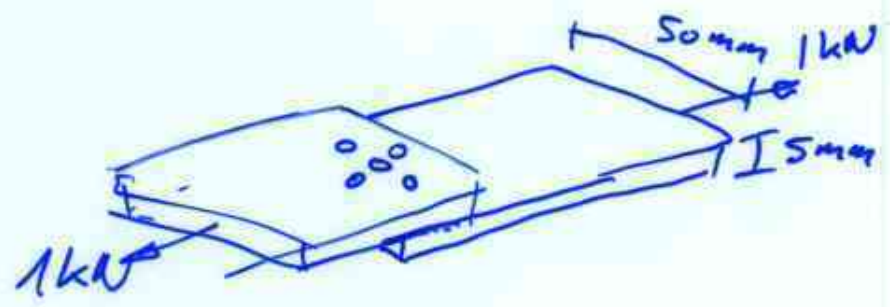


# TRIPLE Riveted LAP JOINT

look @ joint  
↓



φ of rivets  
4mm

- (a) find avg stress in rivets
- (b) " bearing stress
- (c) " tensile stresses in plate.

(a) find avg force first

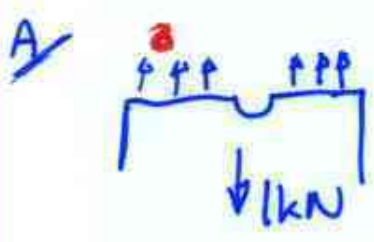
$$\tau = \frac{F}{A} = \frac{2000 \text{ N}}{\left(\frac{4 \times 10^{-3}}{2}\right) \pi} = \underline{\underline{16 \text{ MPa}}}$$

(b) F = 2000 N again

$$\sigma = \frac{F}{A_{\text{projected}}} = \frac{2000}{(4 \times 10^{-3})(5 \times 10^{-3})} = \underline{\underline{10 \text{ MPa}}}$$

↑  
plate thickness

(c) look @ each row separately.



$$\sigma = \frac{1000}{(0.05 - 0.004)(0.005)} = 4.35 \text{ MPa}$$

→ (w - d) (t)