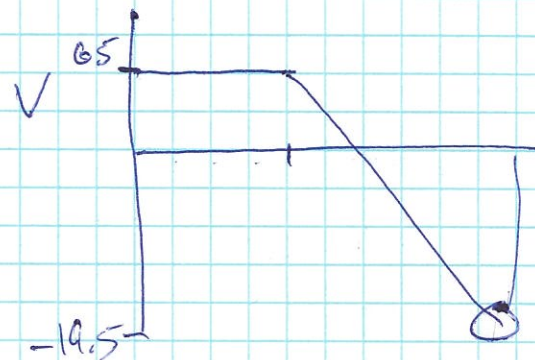
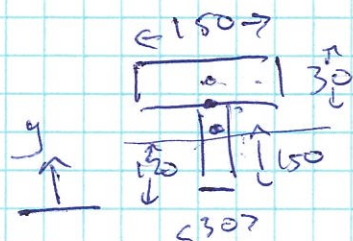


7.1

$\leftarrow Gm \rightarrow$   
 $\downarrow 2G \text{ kN}$   
 $\uparrow A \quad \uparrow B$   
 $A + B = 2G$   
 $\sum M_A = 0 = -G(2G) + 8B$   
 $B = 19.5$   
 $A = 6.5$



$V = -19.5 \text{ kN}$



$\frac{75 + 165}{2} = 120 \text{ mm}$

$I = \frac{1}{12} 30(150)^3 + 150(30)(45)^2$   
 $+ \frac{1}{12} (150)(30)^3 + 150(20)(45)^2$   
 $= 155.6 \times 10^{-6} \text{ m}^4$

$Q = 30(150)(45)$

$t = 30$

$\tau = \frac{VQ}{It}$   
 $= \frac{19.5(\text{kN}) (30)(150)(45)}{155.6 \times 10^{-6} \text{ m}^4 (30) \text{ mm}}$   
 $= 4.88 \text{ MPa}$