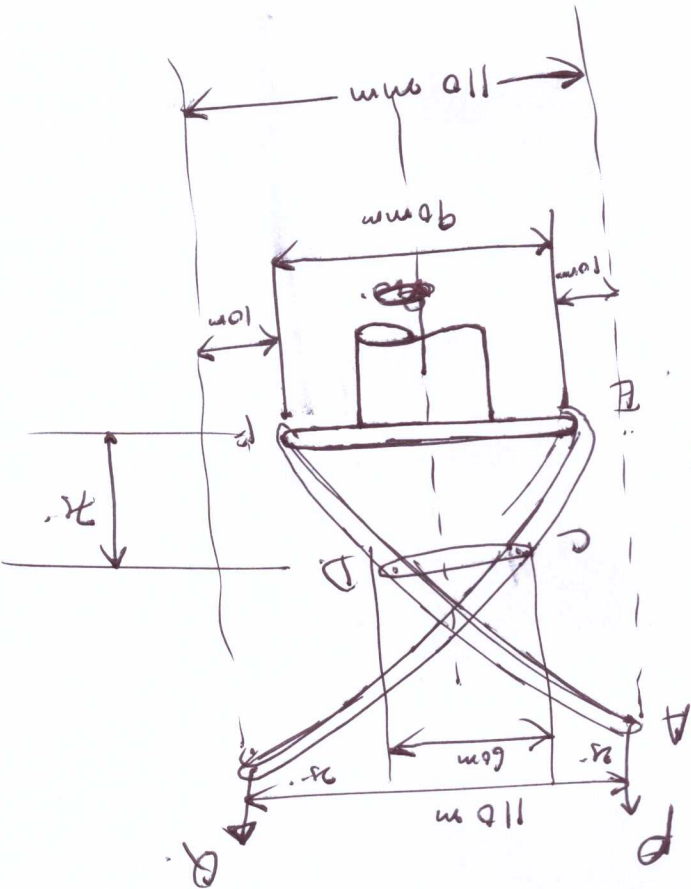


$\sum M_P = 0$
 $A \times 110 \downarrow (W \times 55 = 0$
 $A = \frac{45 \times 55}{110} = 22.5$
 $P = A = 22.5 \text{ kN}$

it is given that total upward force is 45 kN.
 it means
 $P + A = 45 \text{ kN}$
 → the wall equal to weight
 $W = 45 \text{ kN}$ (assume, concept based)
 $P + A = W = 45 \text{ kN}$

$\sum M_P = 0$
 $(P \times 100 = 0$
 $C_x \times 75$
 $C_x = 30 \text{ kN}$
 $\Rightarrow F_x + C_x = 0 \Rightarrow F_x = -30 \text{ kN}$



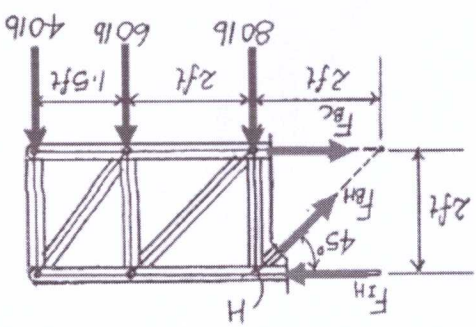
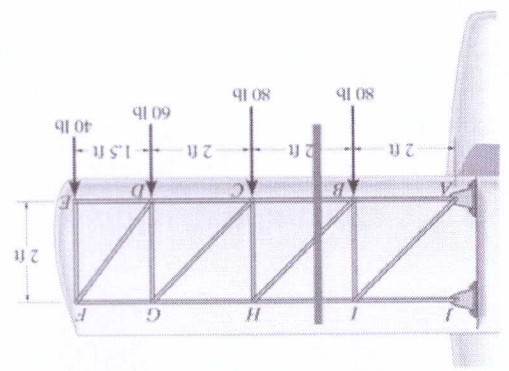
$\rightarrow \sum F_x = F_{IH} - 130 - 255 \cos 45^\circ = 0; F_{IH} = 310 \text{ lb (T)}$

$F_{BC} = 130 \text{ lb (T)}$

$\uparrow + \sum M_H = -F_{BC}(2) + 60(2) + 40(3.5) = 0;$

$F_{BE} = 255 \text{ lb (T)}$

$\uparrow + \sum F_y = 80 + 60 + 40 - F_{BH} \sin 45^\circ = 0;$



SOLUTION