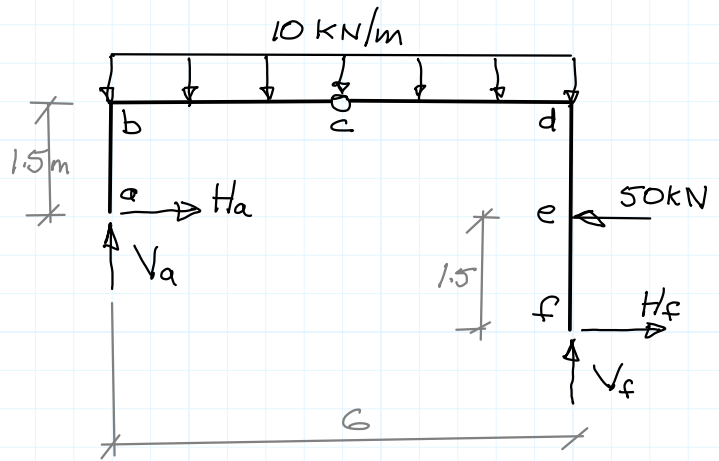
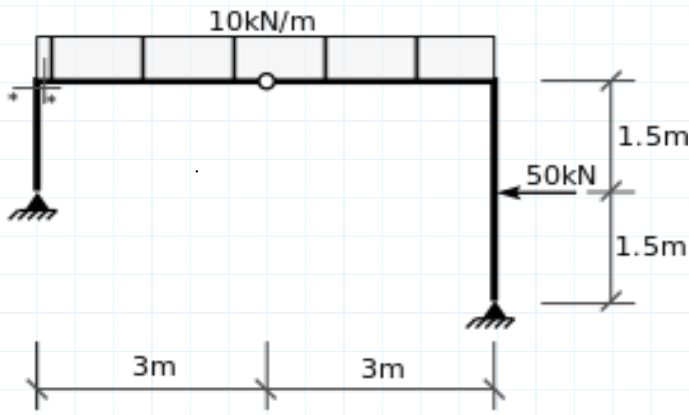


Prob 2.7-2 (Partial)



FBD-1

From FBD-1

$$\sum M_f = 0 \quad (+)$$

$$-V_a \times 6 + 10 \times 6 \times 3 + 50 \times 0 - H_a \times 1.5 = 0$$

1) $4V_a + H_a = 120$

From FBD-2

$$\sum M_c = 0 \quad (+)$$

$$-V_a \times 3 + H_a \times 1.5 + 10 \times 3 \times 1.5 = 0$$

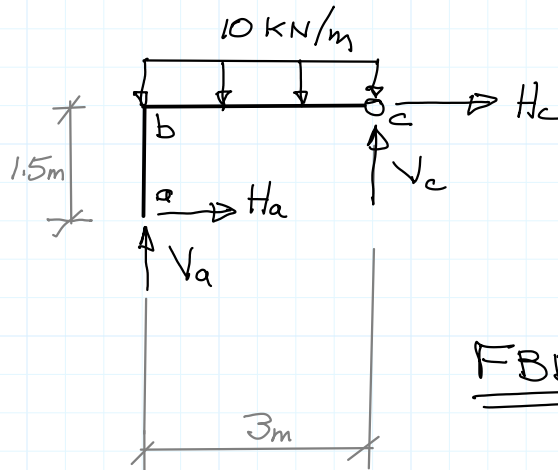
2) $-2V_a + H_a = -30$

1)-2) $6V_a = 150$

$V_a = 25 \quad (\therefore \uparrow)$

2) $-50 + H_a = -30$

$H_a = 20 \quad (\therefore \rightarrow)$



FBD-2

From FBD-1:

$$\sum F_x = 0 \quad \rightarrow$$

$$H_a + H_f - 50 = 0$$

$$20 + H_f - 50 = 0$$

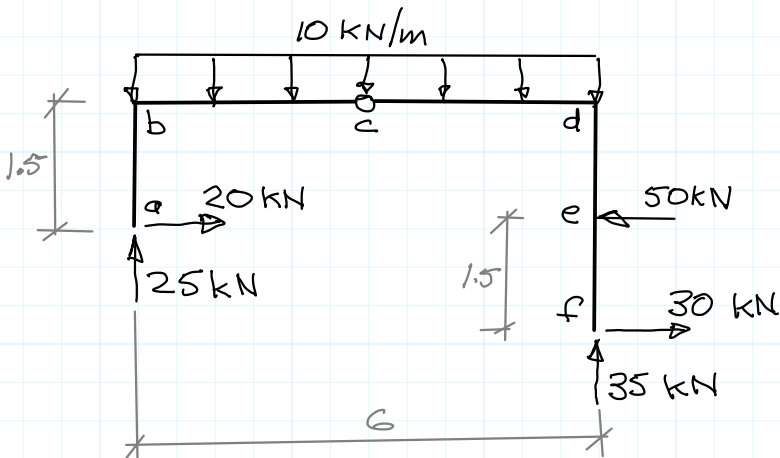
$H_f = 30 \text{ kN} \quad (\therefore \rightarrow)$

$$\sum F_y = 0 \quad \uparrow$$

$$V_a + V_f - 10 \times 6 = 0$$

$$25 + V_f = 60$$

$V_f = 35 \quad (\therefore \uparrow)$



FBD-3: Summary

