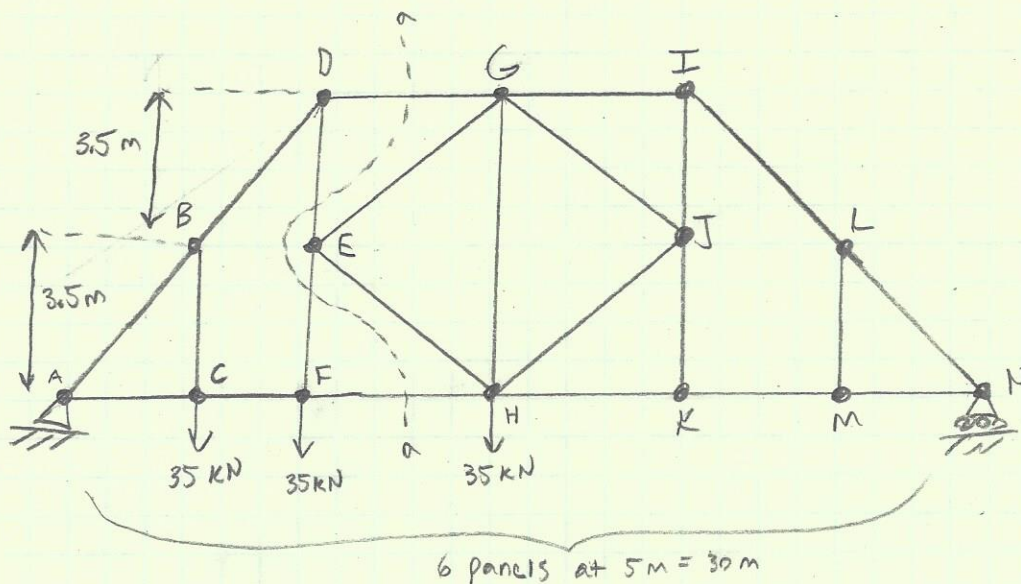
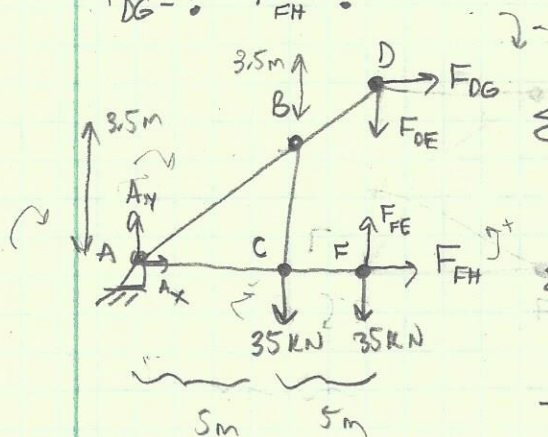


6.43



$F_{DG} = ?$   $F_{FH} = ?$



$$\sum M_E = 0$$

$$-F_{DG}(7m) - 35kN(5m) + A_y(10m) = 0$$

$$\sum F_y = A_y - 70kN = 0$$

$$A_y = 70kN$$

$$-F_{DG}(7m) - 35kN(5m) - 70kN(10m) = 0$$

$$F_{DG} = -125kN \text{ (compression)}$$

$$\sum M_D = 0$$

$$F_{FH}(7m) - 35kN(5m) + 70kN(10m) + A_x(7m)$$

$$\sum F_x = 0$$

$$A_x + 125kN + F_{FH} = 0$$

$$A_x = 125kN - F_{FH}$$

$$F_{FH}(7m) - 35kN(5m) - 70kN(10m) + (125kN - F_{FH})(7m) = 0$$

$$125F_{FH} - F_{FH}^2 = 125$$

$$F_{FH}^2 - 125F_{FH} + 125 = 0$$

$$F_{FH} = 124kN \text{ or } 1kN$$