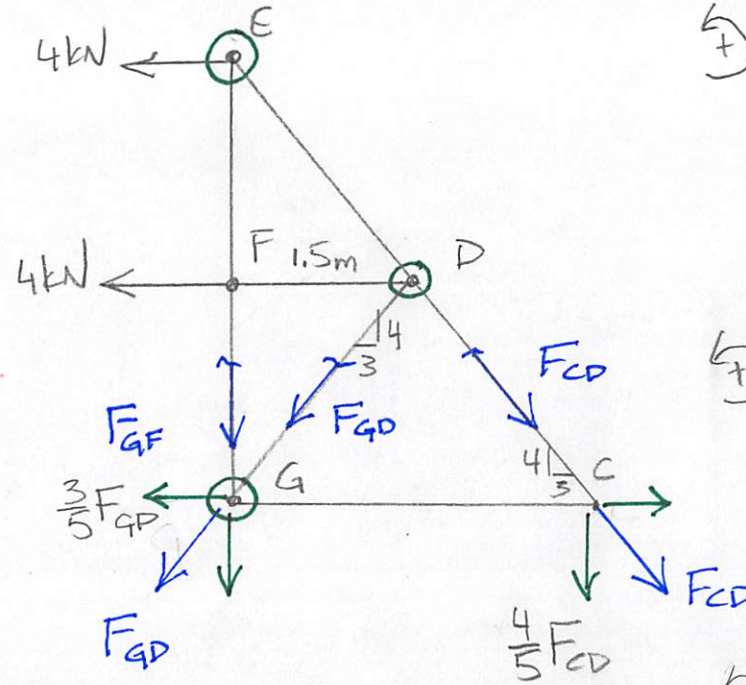
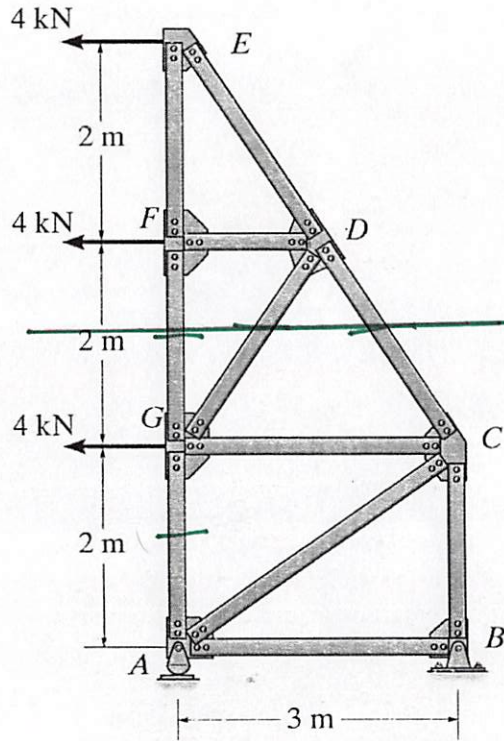


Problem 3c-3: Determine the forces in members FG, GD, CD, and GA.



$$\sum M_D = 0 = F_{GF}(1.5m) + 4kN(2m)$$

$$\underline{F_{GF} = -5.33kN}$$

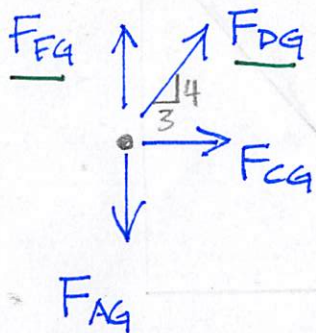
$$\sum M_E = 0 = -\frac{3}{5}F_{GD}(4m) - 4kN(2m)$$

$$\underline{F_{GD} = -3.33kN}$$

$$\sum M_G = 0 = -\frac{4}{5}F_{CD}(3m) + 4kN(2m + 4m)$$

$$\underline{F_{CD} = 10kN}$$

JOINT G



$$\sum F_y = 0$$

$$= F_{GF} + \frac{4}{5}F_{DC} - F_{AG}$$

$$\underline{F_{AG} = -8kN}$$