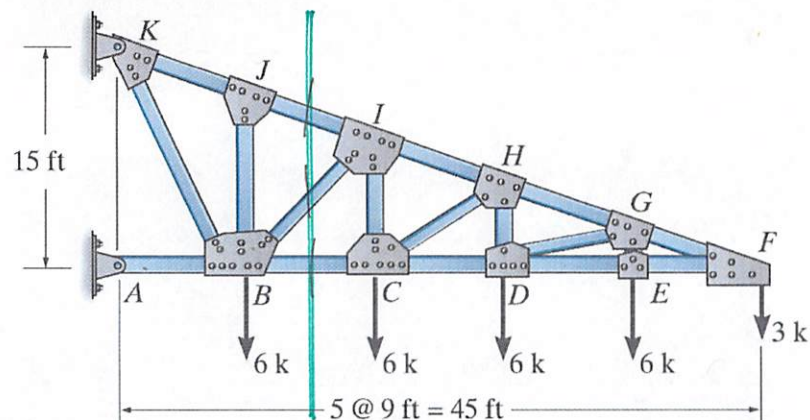
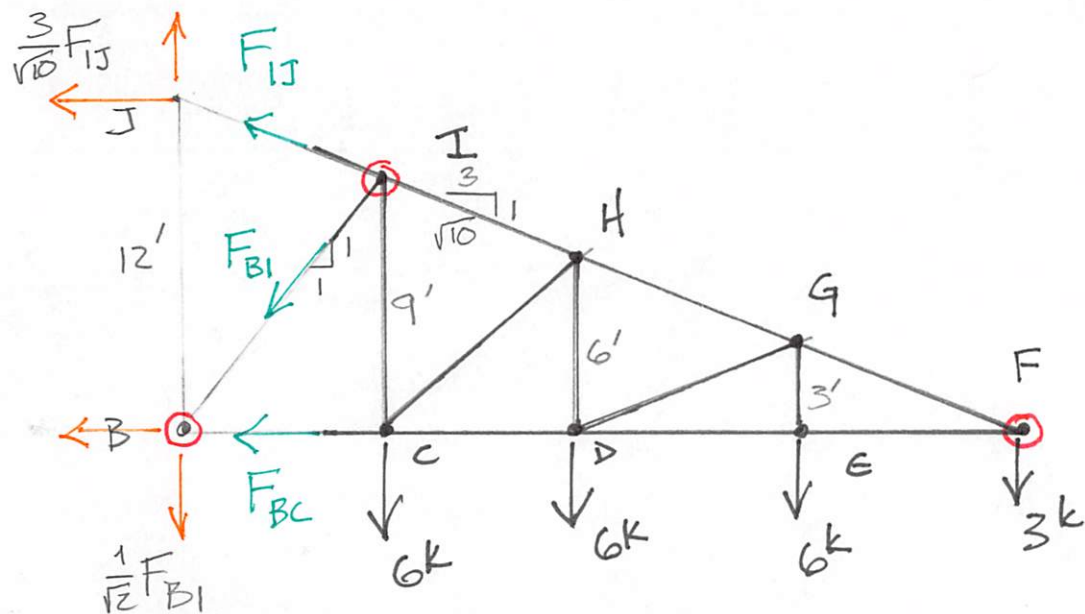


Problem 3c-5: Determine the forces in members IJ , BI , and BC .



$$\sum M_B = 0 = \frac{3}{\sqrt{10}} F_{IJ}(12') - 6^k(9' + 18' + 27') - 3^k(36')$$

$$\underline{\underline{F_{IJ} = 37.95 \text{ k}}}$$



$$\sum M_I = 0 = -F_{BC}(9') - 6^k(9' + 18')$$

$$\underline{\underline{F_{BC} = -27 \text{ k}}}$$

$$\sum M_F = 0 = 6^k(9' + 18' + 27') + \frac{1}{\sqrt{2}} F_{BI}(36')$$

$$\underline{\underline{F_{BI} = -12.73 \text{ k}}}$$