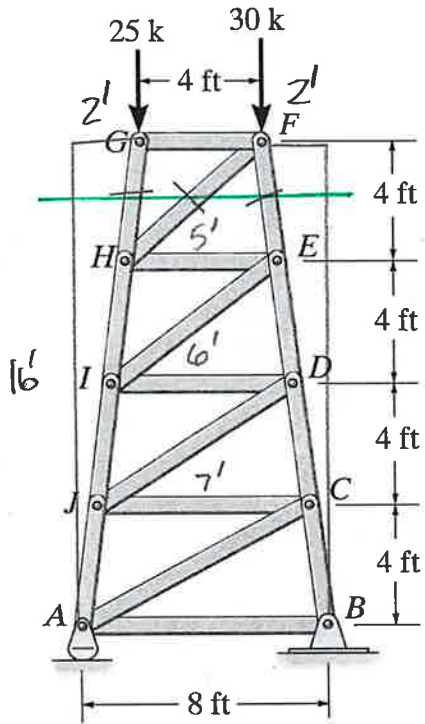


Problem 3c-8: Determine the forces in members EF, FH, and GH.

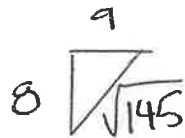
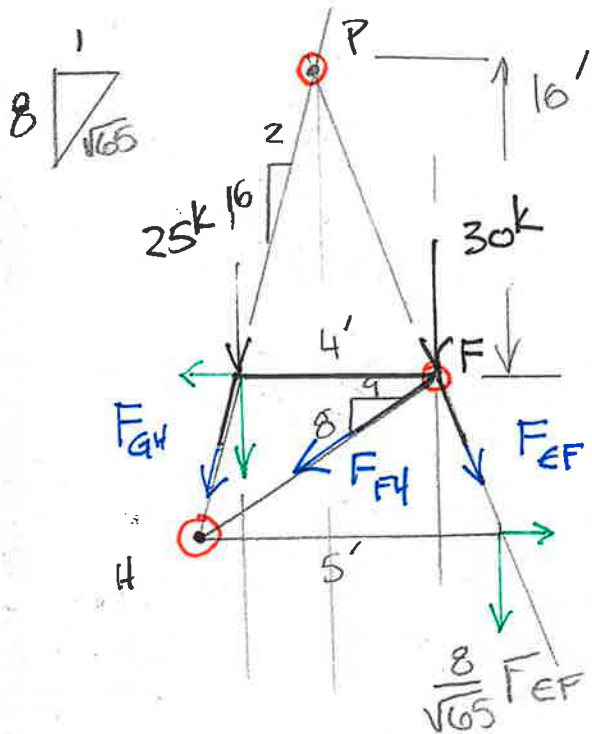


$$\sum M_F = 0 = \frac{8}{\sqrt{65}} F_{GH} (4') + 25k(4')$$

$$\underline{\underline{F_{GH} = -25.19k}}$$

$$\sum M_H = 0 = -\frac{8}{\sqrt{65}} F_{EF} (5') - 25k(1/2') - 30k(4.5')$$

$$\underline{\underline{F_{EF} = -29.73k}}$$



$$\sum F_x = 0 = -\frac{1}{\sqrt{65}} F_{GH} + \frac{1}{\sqrt{65}} F_{EF} - \frac{9}{\sqrt{145}} F_{FH}$$

$$\underline{\underline{F_{FH} = -0.75k}}$$

