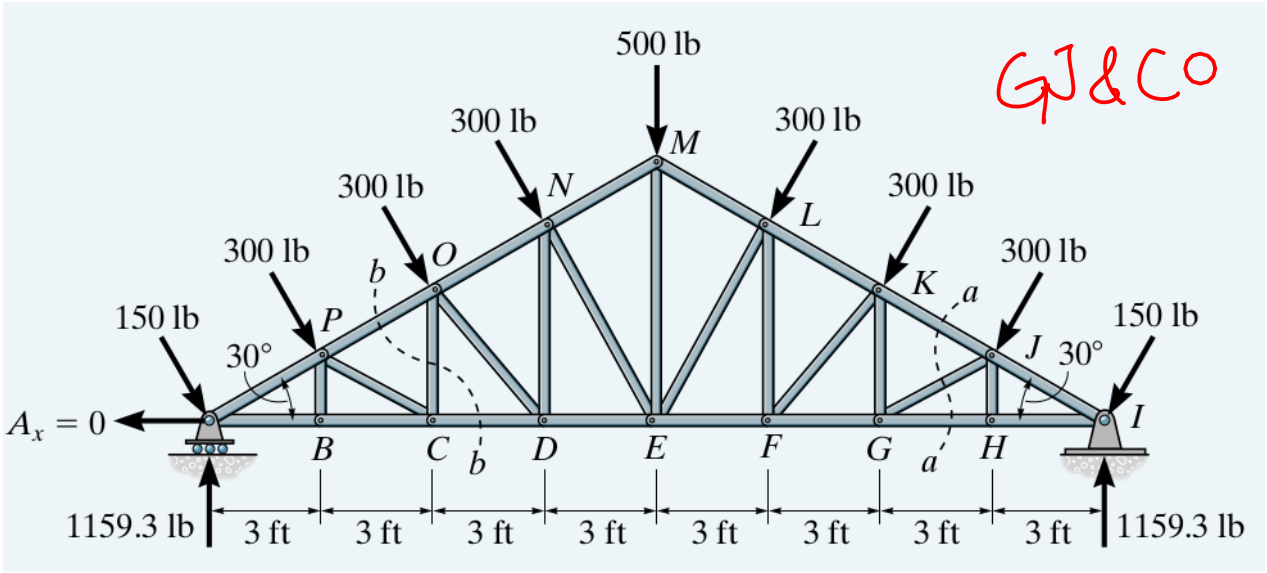


GJ & CO

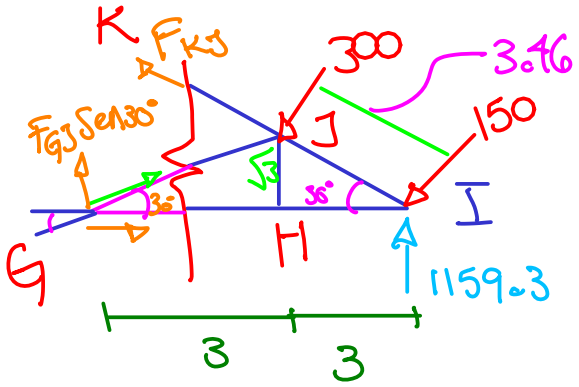
Reacciones

$\Sigma F_x \rightarrow I_x = 0$

$\Sigma F_y = 150\cos 30° (14) + 500 = 2R_v$

$R_v = 1159.3 \uparrow$

Determinacion de F_{GJ}



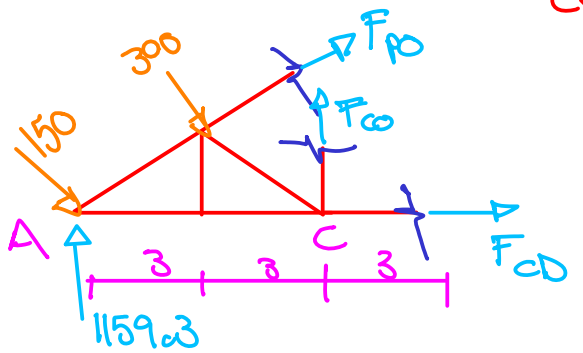
$\Sigma M_I = F_{GJ}\text{Sen}30°(6) - 300(3.46) = 0$

$F_{GJ} = \underline{346.41 \text{ lb (c)}}$

$\tan 30° = \frac{CO}{3} \rightarrow CO = \sqrt{3}$

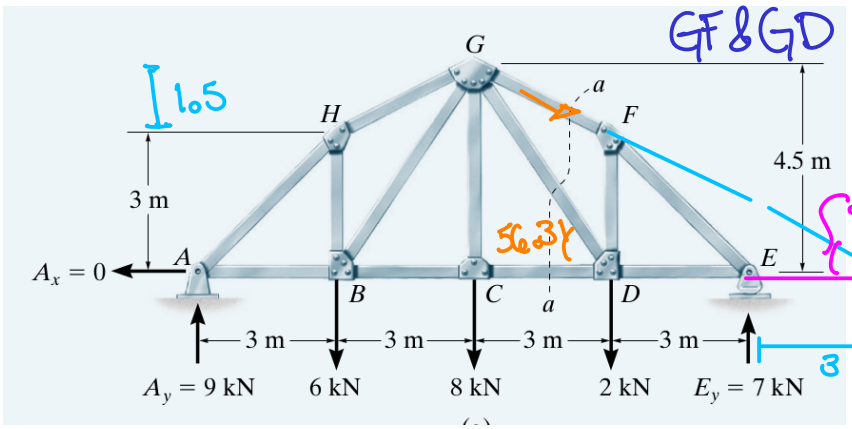
$h = \sqrt{(\sqrt{3})^2 + 3^2} = \sqrt{3+9} = 3.46$

Determinacion de F_{CO}



$\Sigma M_A = 300(3.46) - F_{CO}(6) = 0$

$F_{CO} = \underline{173 \text{ lb. (T)}}$

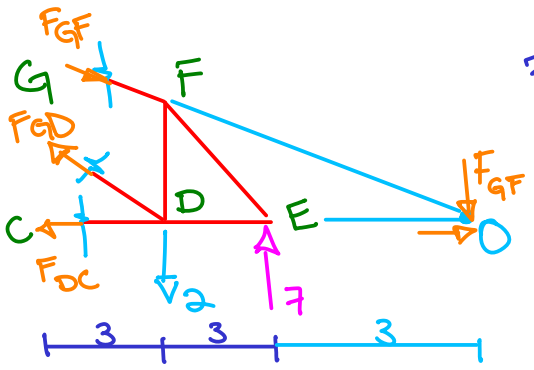


Reacciones

$\Sigma M_A = 6(3) + 8(6) + 2(9) - E_y(12) = 0$

$E_y = 7 \text{ KN}$

$\Sigma F_y = -6 - 8 - 2 + 7 + A_y = 0 \rightarrow A_y = 9$



F_{GF}

$\curvearrowright \Sigma M_D = 7(3) + F_{GF}\,\text{sen}26.57(6) = 0$

$\curvearrowright F_{GF} = -7.8$

$F_{GF} = 7.8\ (C.)$

$\tan\theta = \frac{CO}{CA} = \frac{4.5}{3}$

$\theta = \tan^{-1}(4.5/3) = 56.31$

$\theta = \tan^{-1}(1.5/9) = 26.57$

$\Sigma M_D = -7(3) + 2(6) - F_{GD}\,\text{sen}\,56.3°\,(6) = 0 \rightarrow F_{GD} = -1.8\ kN$

$\therefore F_{GD} = 1.8\ kN\ (C)$