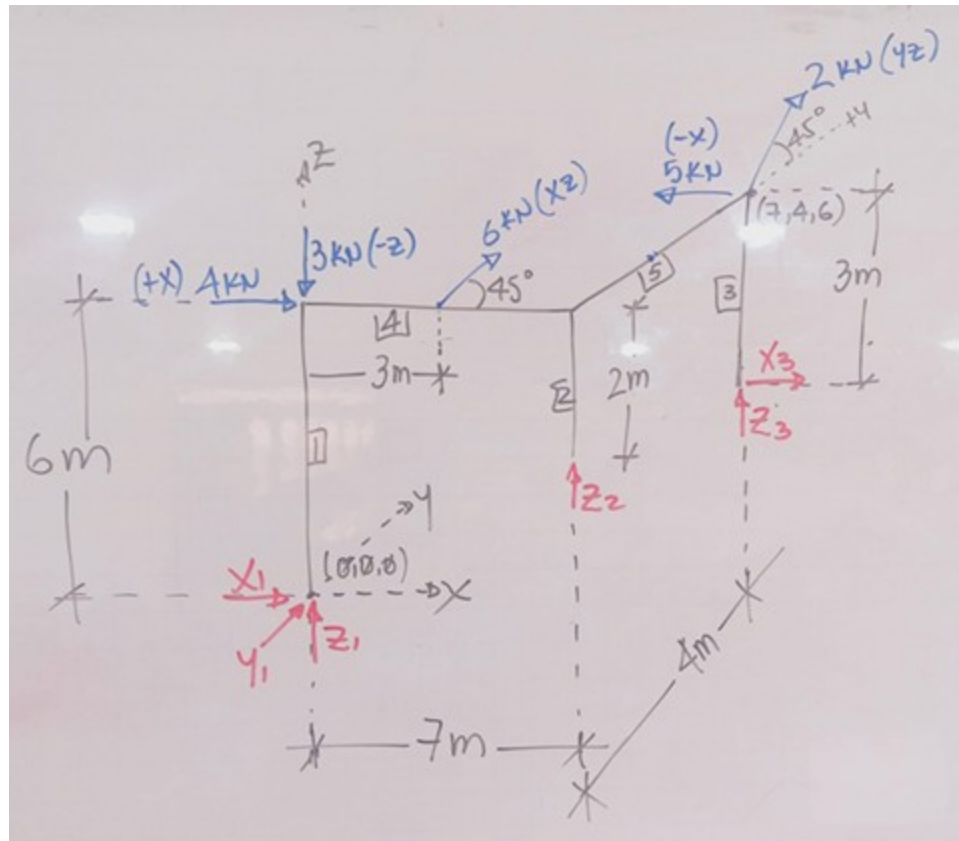




#1: [CaseMode := Sensitive, InputMode := Word]

Ecuaciones de equilibrio estático:

[$\sum F_x=0$;
 $\sum F_y=0$;
 $\sum F_z=0$;
 $\sum M_x=0$ respecto al nudo 1;
 $\sum M_y=0$ respecto al nudo 1;
 $\sum M_z=0$ respecto al nudo 1]

$$\#2: \left[\begin{array}{l} X1 + X3 + 4 + 6 \cdot \frac{\sqrt{2}}{2} - 5 = 0 \\ Y1 + 2 \cdot \frac{\sqrt{2}}{2} \\ Z1 + Z2 + Z3 - 3 + 6 \cdot \frac{\sqrt{2}}{2} + 2 \cdot \frac{\sqrt{2}}{2} = 0 \\ Z3 \cdot 4 - \left(2 \cdot \frac{\sqrt{2}}{2} \right) \cdot 6 + \left(2 \cdot \frac{\sqrt{2}}{2} \right) \cdot 4 = 0 \\ - Z2 \cdot 7 - Z3 \cdot 7 + X3 \cdot 3 + 4 \cdot 6 + \left(6 \cdot \frac{\sqrt{2}}{2} \right) \cdot 6 - \left(6 \cdot \frac{\sqrt{2}}{2} \right) \cdot 3 - 5 \cdot 6 - \left(2 \cdot \frac{\sqrt{2}}{2} \right) \cdot 7 = 0 \\ - X3 \cdot 4 + 5 \cdot 4 + \left(2 \cdot \frac{\sqrt{2}}{2} \right) \cdot 7 = 0 \end{array} \right]$$

$$\#3: \left[\begin{array}{l} X1 = -\frac{19 \cdot \sqrt{2}}{4} - 4 \wedge X3 = \frac{7 \cdot \sqrt{2}}{4} + 5 \wedge Y1 = -\sqrt{2} \wedge Z1 = \frac{12}{7} - \frac{141 \cdot \sqrt{2}}{28} \wedge Z2 = \frac{15 \cdot \sqrt{2}}{28} \\ + \frac{9}{7} \wedge Z3 = \frac{\sqrt{2}}{2} \end{array} \right]$$

$$\#4: [X1 = -10.71751442 \wedge X3 = 7.474873734 \wedge Y1 = -1.414213562 \wedge Z1 = -5.407289724 \wedge Z2 = 2.043328694 \wedge Z3 = 0.7071067811]$$