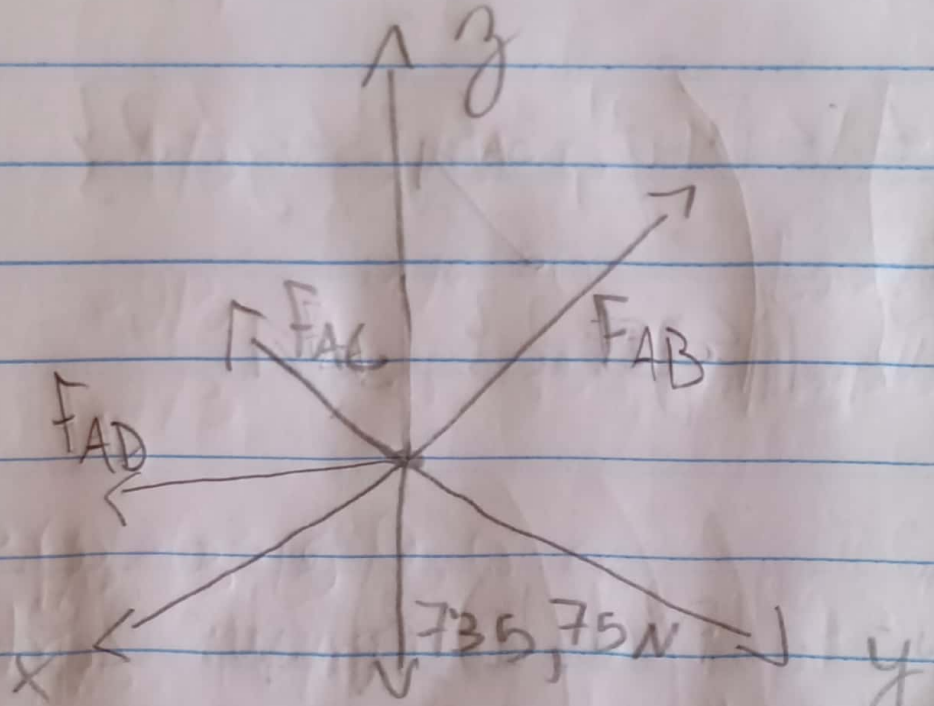
MECAB

a)



DOM SEG TER QUA QUI SEX SÁB
DOM LUN MAR MIÉ JUE VIE SÁB

b) $A=(0,0,0)$ $B=(-1;\ 1,5;\ 3)$ $C=(-1,-2,2)$ $D=(3,-4,0)$

$\vec{F}_{AB} = F_{AB}\dfrac{(-1;\ 1,5;\ 3)}{7/2} = F_{AB}\dfrac{(-2,3,6)}{7}$

$\vec{F}_{AC} = F_{AC}\dfrac{(-1,-2,2)}{3}$ $\quad \vec{F}_{AD} = F_{AD}\dfrac{(3,-4,0)}{5}$

Em x: $-\dfrac{2F_{AB}}{7} - \dfrac{F_{AC}}{3} + \dfrac{3F_{AD}}{5} = 0$

Em y: $\dfrac{3F_{AB}}{7} - \dfrac{2F_{AC}}{3} - \dfrac{4F_{AD}}{5} = 0$

Em z: $\dfrac{6F_{AB}}{7} + \dfrac{2F_{AC}}{3} - 735{,}75 = 0$

$\frac{6F_{AB}}{7} - \frac{3F_{AC}}{3} - 735{,}75 = 0$

$$\left(\begin{array}{cccc} -2/7 & -1/3 & 3/5 & 0 \\ 3/7 & -2/3 & -4/5 & 0 \\ 6/7 & 2/3 & 0 & 735{,}75 \end{array}\right) \left(\begin{array}{cccc} -30 & -35 & 63 & 0 \\ 45 & -70 & -84 & 0 \\ 72 & 56 & 0 & 61803 \end{array}\right)$$

$$\left(\begin{array}{cccc} -30 & -35 & 63 & 0 \\ 45 & -70 & -84 & 0 \\ 72 & 56 & 0 & 61803 \end{array}\right) \left(\begin{array}{cccc} -30 & -35 & 63 & 0 \\ 0 & -245/2 & 21/2 & 0 \\ 0 & -28 & 756/5 & 61803 \end{array}\right)$$

$$\left(\begin{array}{cccc} -30 & -35 & 63 & 0 \\ 0 & -245/2 & 21/2 & 0 \\ 0 & 0 & 744/5 & 61803 \end{array}\right)$$

$F_{AD} = \frac{61803 \cdot 5}{744} = 415{,}343N$

$F_{AC} = \frac{21 F_{AD}}{2} \cdot \frac{2}{245} = 35{,}601$

$F_{AB} = \frac{63 F_{AD} - 35 F_{AC}}{30} = 830{,}685$