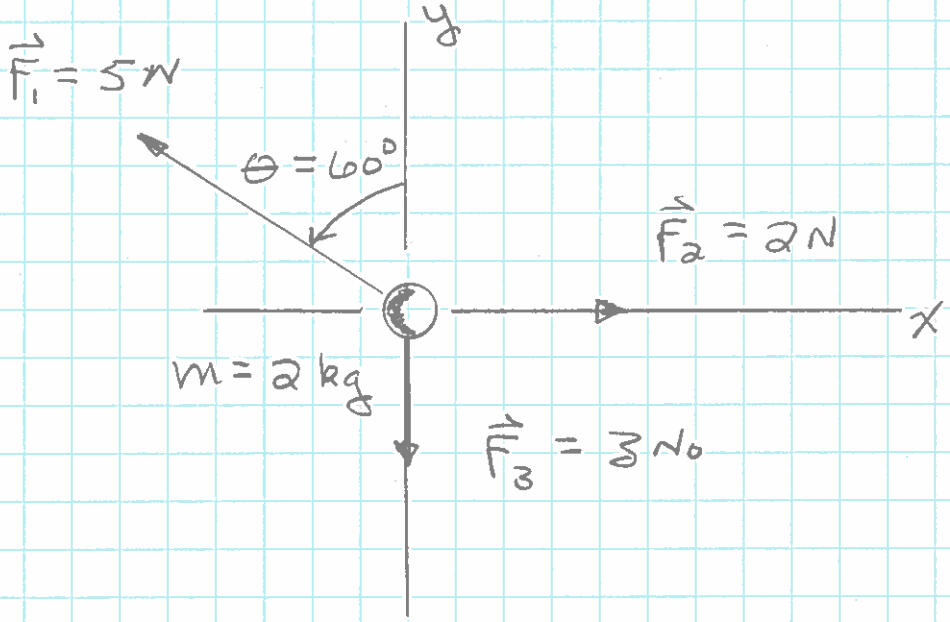
FBD:



Find: Components of acceleration.

$$\Sigma F_x = -F_1 \sin\theta + F_2 = ma_x$$

$$a_x = \frac{-F_1 \sin\theta + F_2}{m} = -1.165\ m/s^2$$

$$\Sigma F_y = F_1 \cos\theta - F_3 = ma_y$$

$$a_y = \frac{F_1 \cos\theta - F_3}{m} = -0.25\ m/s^2$$

So, $\vec{a} = -1.165\,\hat{i} - 0.25\,\hat{j}\ \ m/s^2$