

$$\begin{aligned}\bar{v}_{O'} &\neq 0 \\ \bar{a}_{O'} &\neq 0 \\ \bar{\omega} &\neq 0\end{aligned}$$

$$\bar{a} = \bar{a}' + \bar{a}_t + \bar{a}_c$$

$$\Rightarrow \boxed{\bar{a}' = \bar{a} - \bar{a}_t - \bar{a}_c}$$

$$\vec{F} = m \bar{a}$$

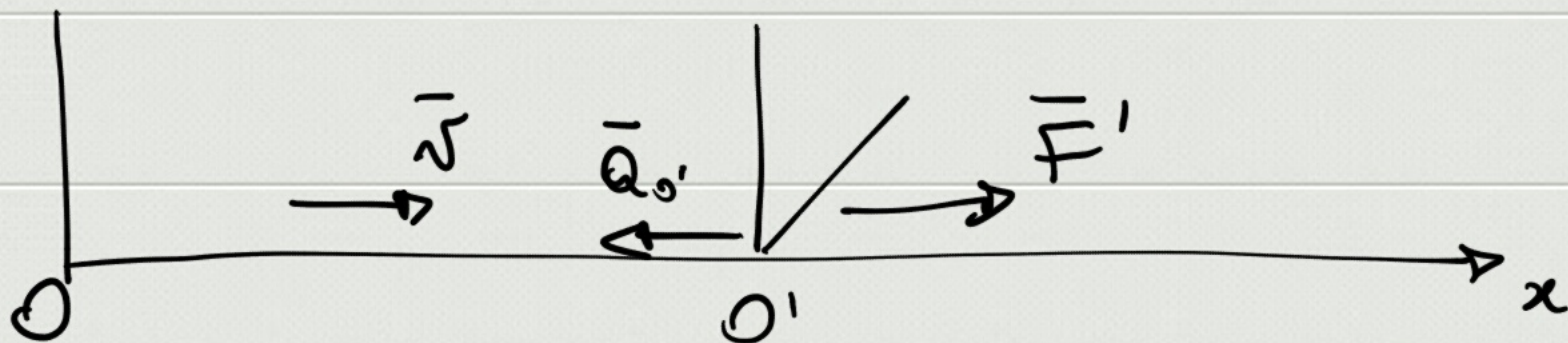
$$\vec{F}' = m \bar{a}' = m \bar{a} - m \bar{a}_t - m \bar{a}_c =$$

$$= \vec{F} + \underbrace{(-m \bar{a}_t - m \bar{a}_c)}$$

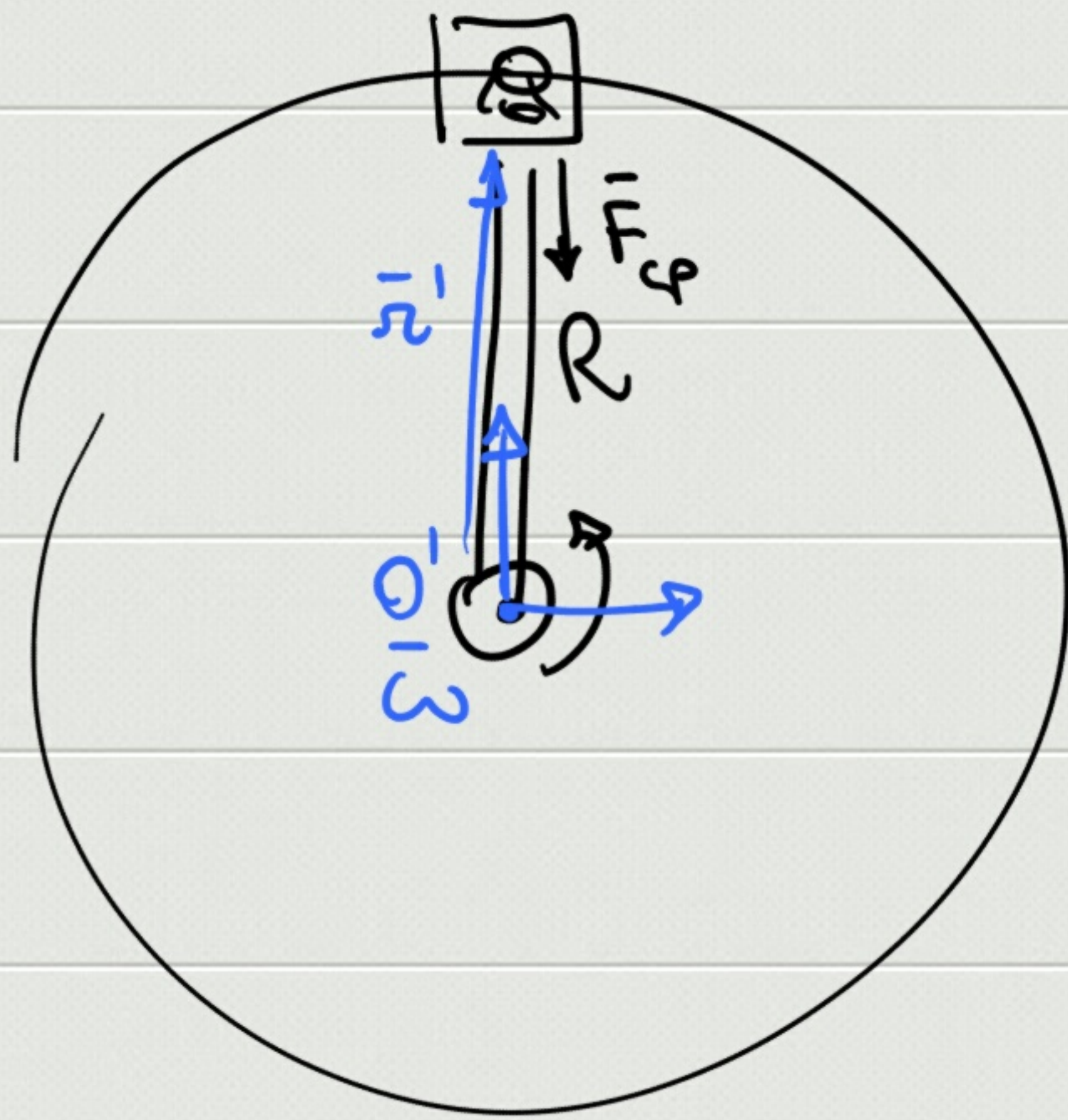
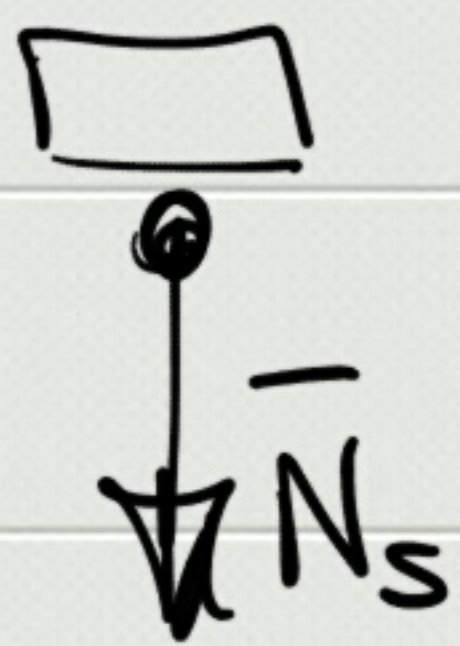
force apparenti

$$\boxed{F=0} \Rightarrow a=0 \Rightarrow \vec{F}' = -m \bar{a}_t - m \bar{a}_c \neq 0$$

$$= m \bar{a}' \Rightarrow \bar{a}' \neq 0$$



$$F' = -m \bar{a}_{O'}$$



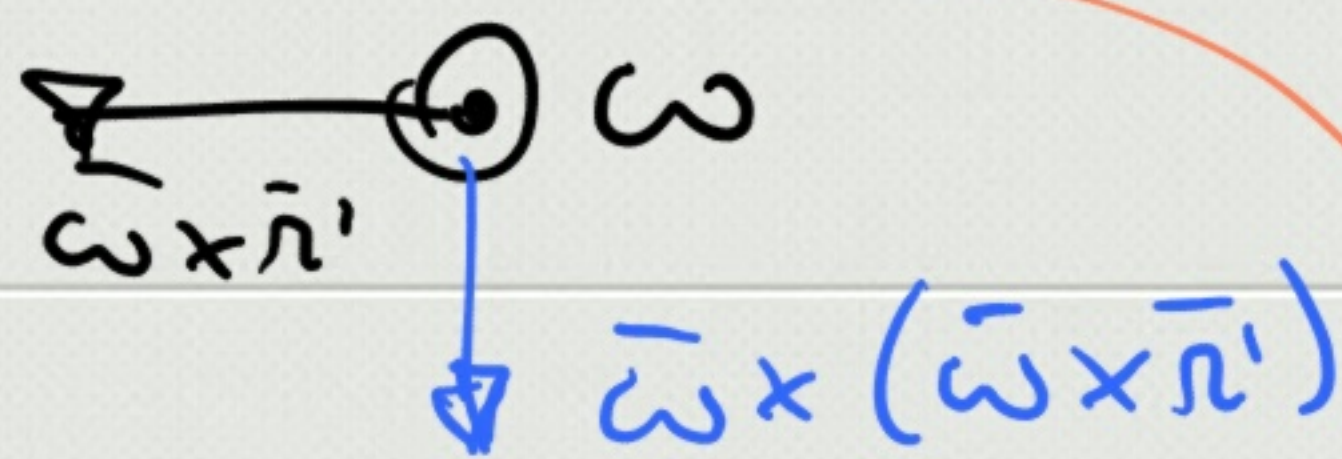
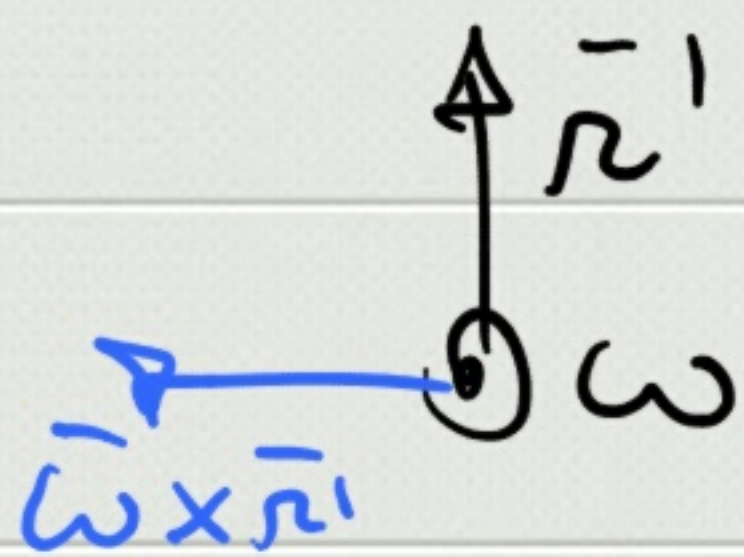
$$\boxed{\begin{aligned}\omega &= \text{cost} \\ \dot{\theta}' &= 0 \\ \ddot{\theta}' &= 0\end{aligned}}$$

$$\vec{F}_c = N_s = m \omega^2 R \vec{u}_N$$

$$\begin{aligned}\vec{r}' &= \text{cost} \\ \dot{\vec{r}}' &= 0 \\ \ddot{\vec{r}}' &= 0\end{aligned}$$

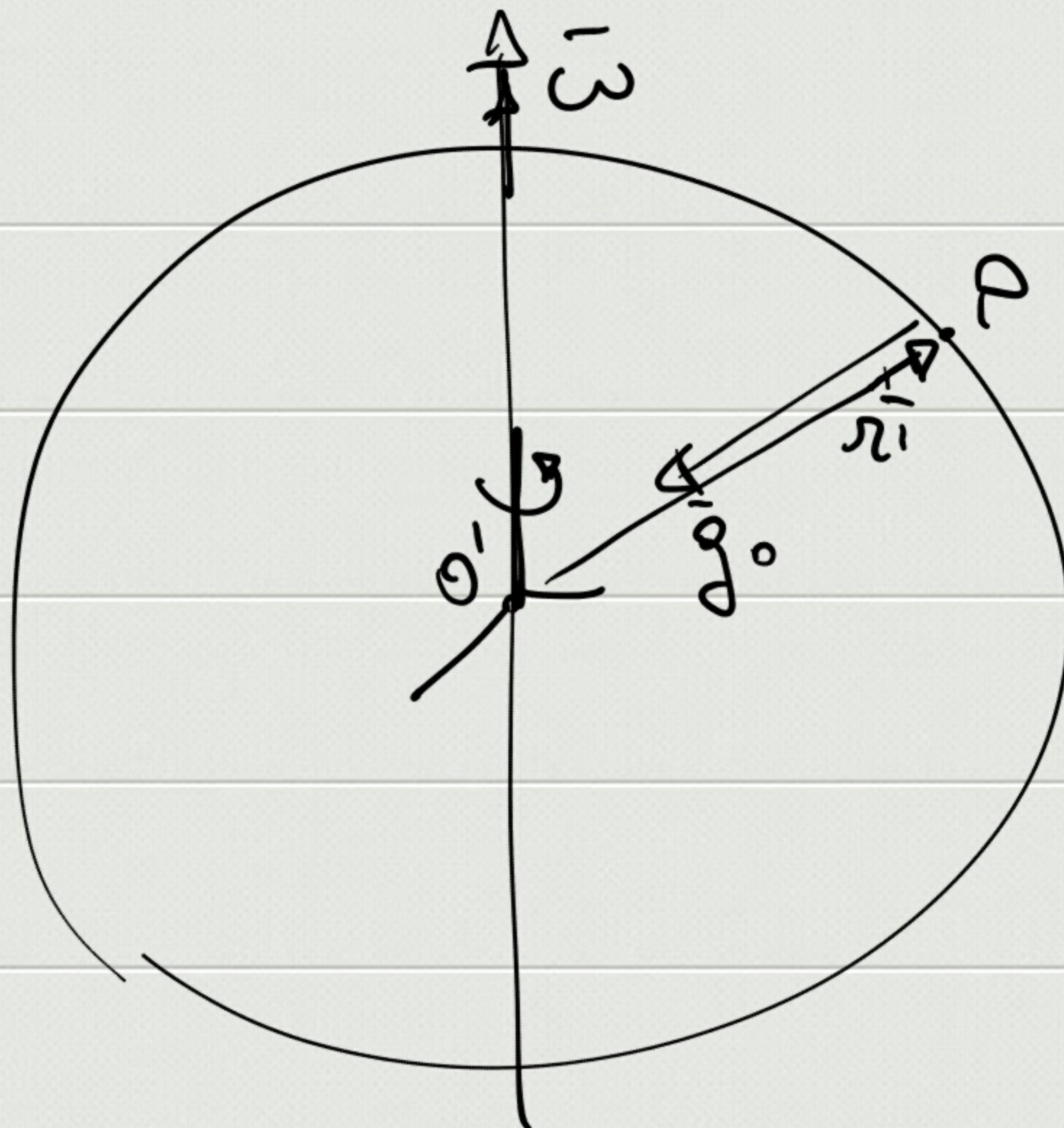
$$\vec{\pi}' = m \vec{a} - m \vec{a}_t - m \vec{a}_c =$$

$$= m \omega^2 R \vec{u}_N - m \vec{\omega} \times (\vec{\omega} \times \vec{r}') = 0$$



$$\begin{aligned}& -m \vec{\omega} \times (\vec{\omega} \times \vec{r}') \\ & \uparrow [m \omega^2 R] \\ & \uparrow \text{modulo}\end{aligned}$$

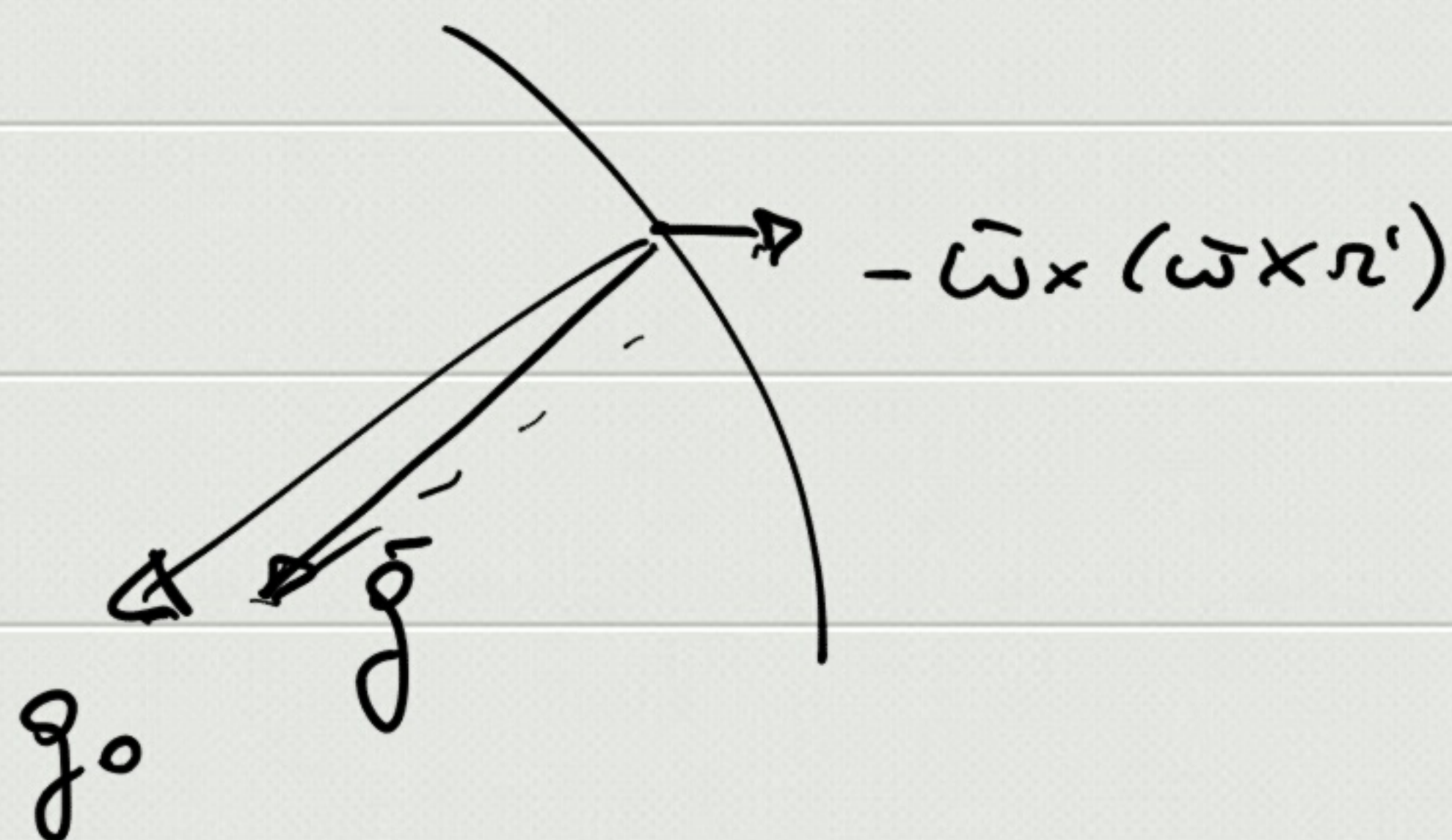
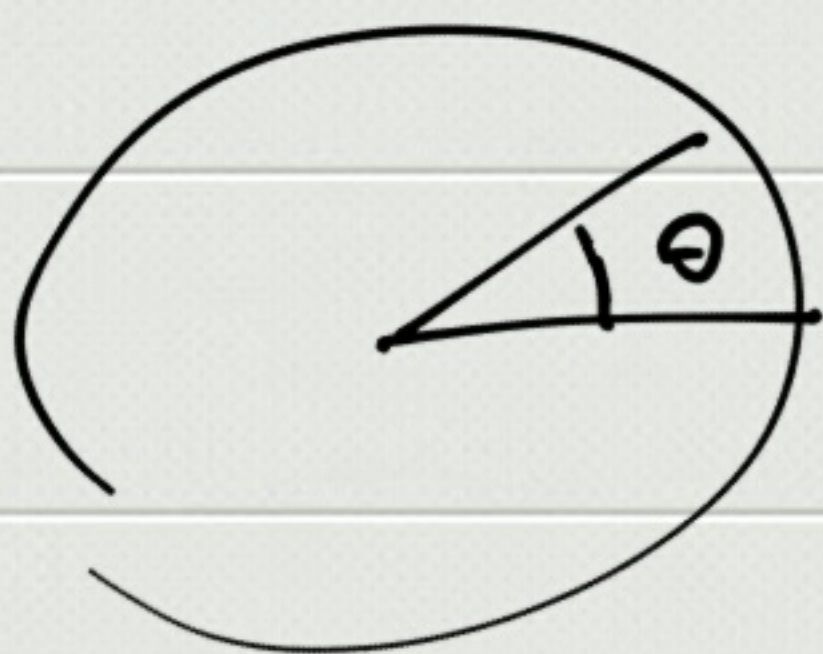
→ Forza centrifuga



$$\vec{g}_0 = \vec{g} + \vec{\omega} \times (\vec{\omega} \times \vec{r}') + 2\vec{\omega} \times \vec{v}'$$

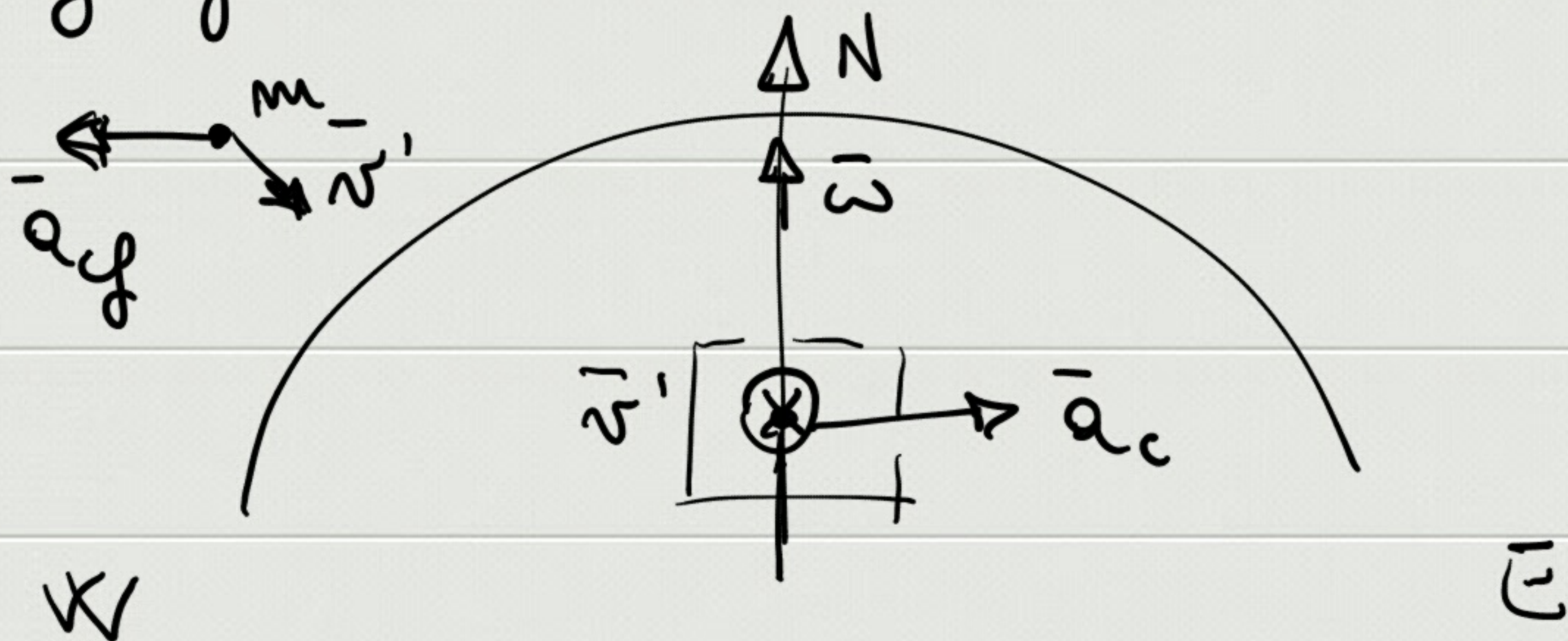
$$\vec{g} = \vec{g}_0 - \vec{\omega} \times (\vec{\omega} \times \vec{r}') - 2\vec{\omega} \times \vec{v}'$$

$$\vec{v}' = 0 \quad \vec{g} = \vec{g}_0 - \vec{\omega} \times (\vec{\omega} \times \vec{r}')$$

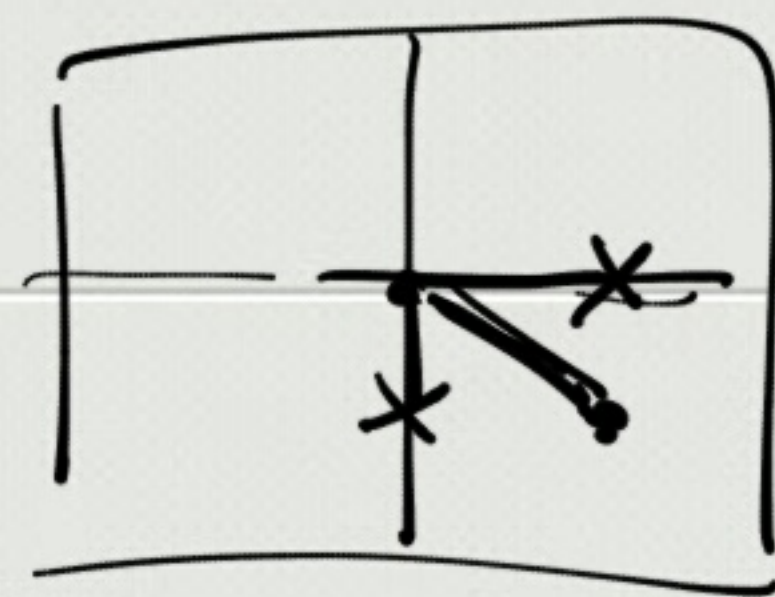


$$\omega^2 R_T \cos \theta = 3.38 \cdot 10^{-2} \cos \theta \text{ m/s}^2$$

$$\bar{g} = \bar{g}_0 - \bar{\omega} \times (\bar{\omega} \times \bar{r}') - 2\bar{\omega} \times \bar{v}'$$



S



$$h = 100 \text{ m} \quad \Theta = 45^\circ$$

$$\Delta x_{cf} = 17.3 \text{ cm}$$

$$\Delta y_{cor} = 1.6 \text{ cm}$$

