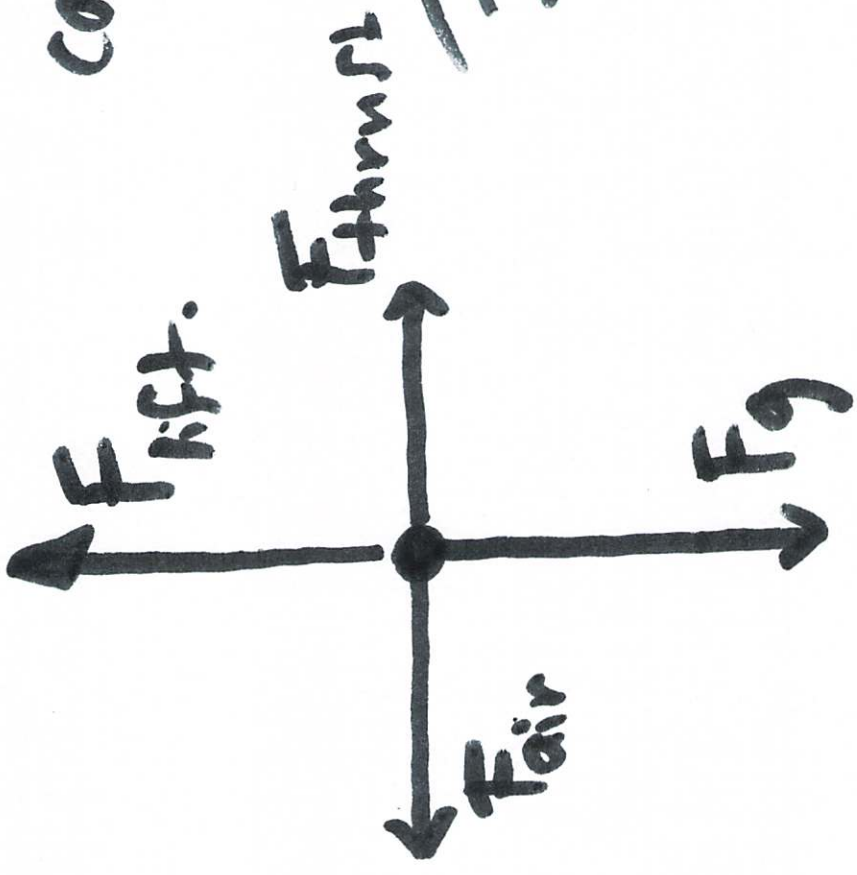


2013-09-26



$V \rightarrow$ velocity.
constant speed

constant altitude

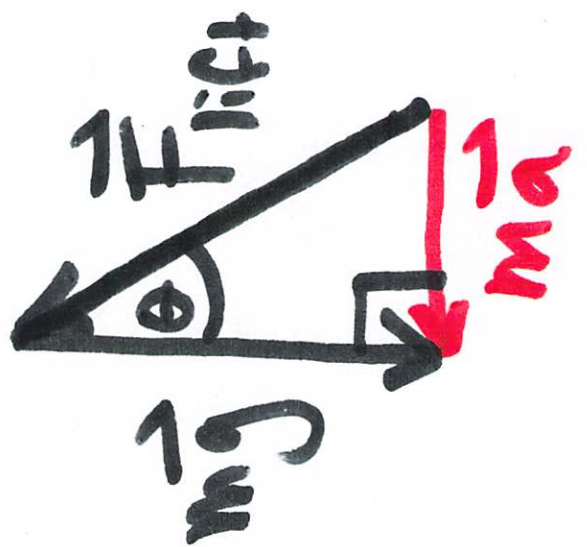




$$\vec{F}_g = m\vec{g}$$

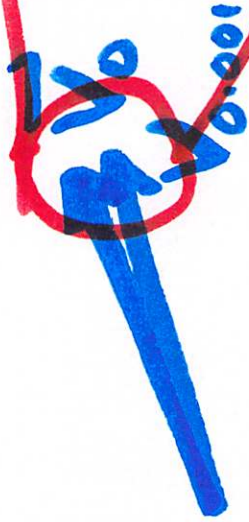
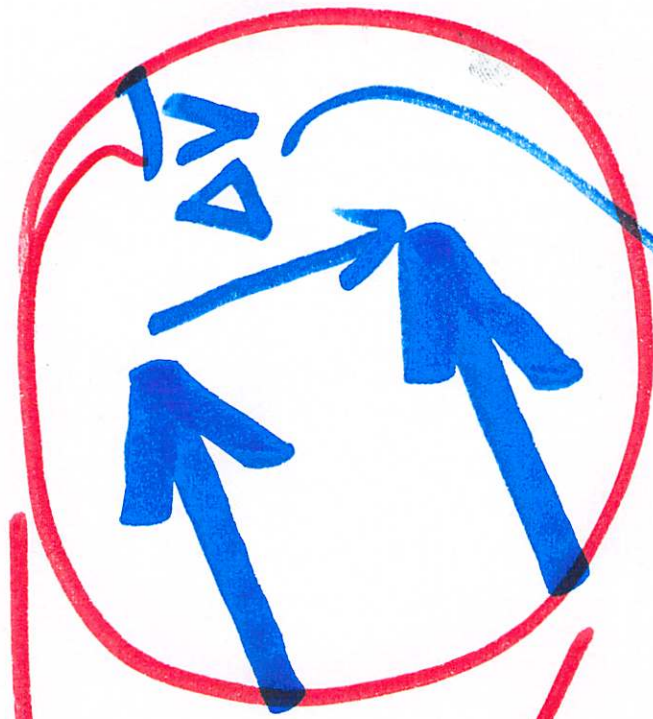


turning at
constant altitude.
& constant speed



$$|\vec{F}_{lift}| = \frac{m|g|}{\cos\theta}$$

$$\vec{a} \equiv \lim_{\Delta t \rightarrow 0} \frac{\vec{v}(t+\Delta t) - \vec{v}(t)}{\Delta t}$$



when the direction

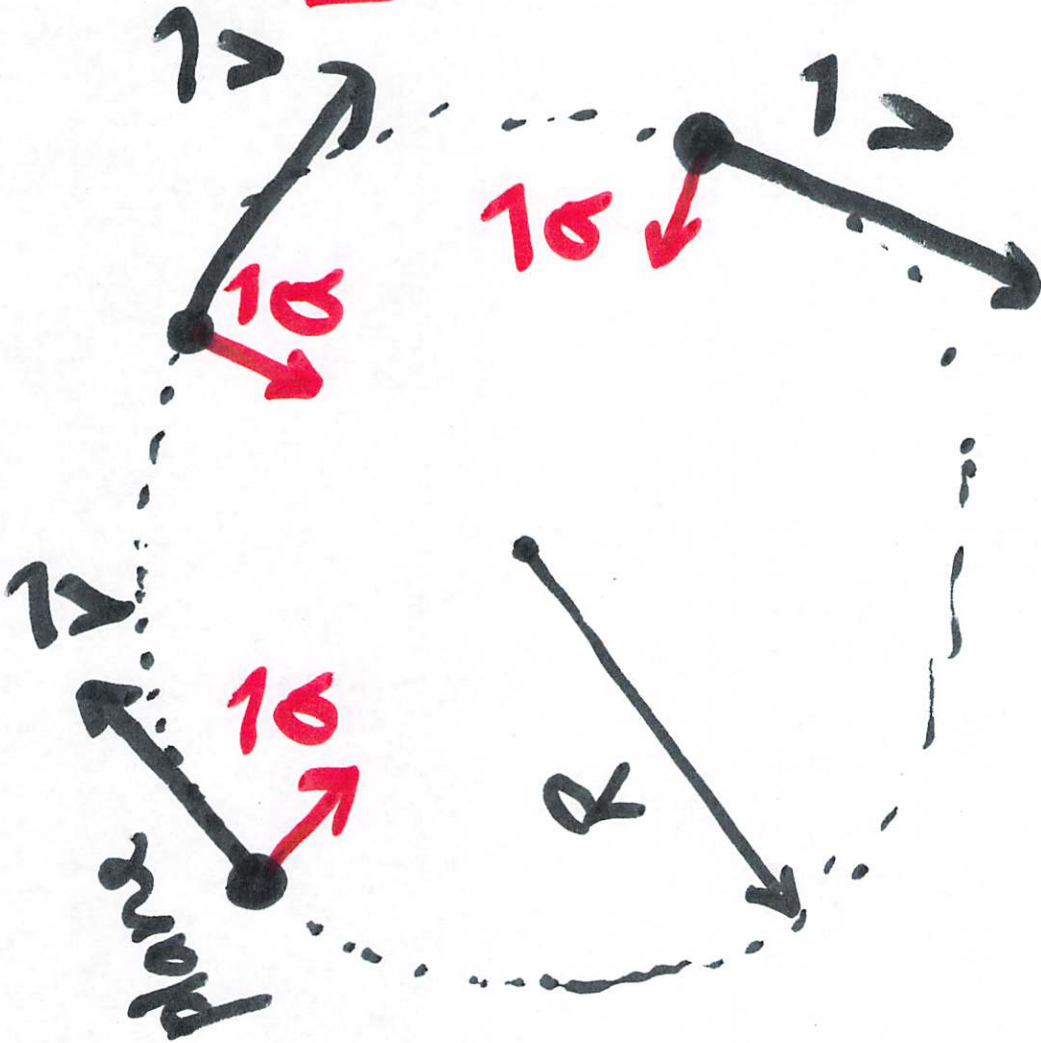
is changing but

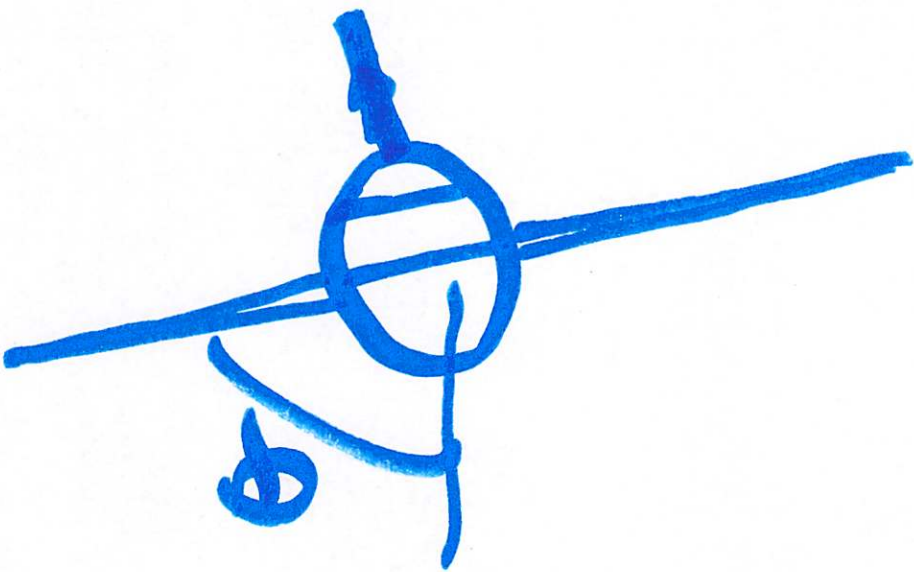
not the amplitude

perpendicular to \vec{v}

$$|\vec{v}|^2 = \frac{v^2}{R}$$

$$|\vec{r}| = R$$





$$|\vec{F}_{\text{net}}| = \frac{mg}{\cos \theta}$$