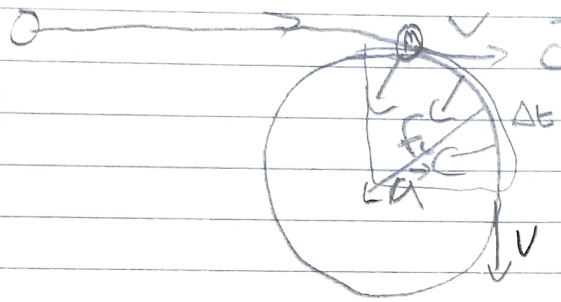
Notes 10/30/24



$\vec{a} = \frac{\Delta V}{\Delta t} = \frac{V - V_0}{\Delta t}$

The acceleration is all towards the middle of the circle

$\vec{a}_c$ = Centripital force - is any force keeping an object in the middle

The direction of the net force is the direction of the acceleration $\vec{F}_c = m\vec{a}_c$

$F_c = m\frac{v^2}{r}$

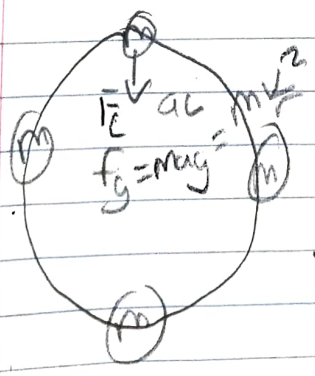
Coefficient of Friction

$F_M = \mu \cdot F_\perp$

μ = Coefficient of friction, $F_\perp$ = normal force

There is always some value to the Centripital forces, are they acting on a right angle? And what force must be acting on the object to keep it in the center

For the lab



Find a point where the tension in the strings goes to zero.

The period is the time to cover a distance.

If we have the mass, radius, and force of gravity we can predict the velocity and period

$V = \frac{\text{circum}}{T}$

Period is measured in (sec)

Persca is frequency

Always in meters, seconds, and kilograms