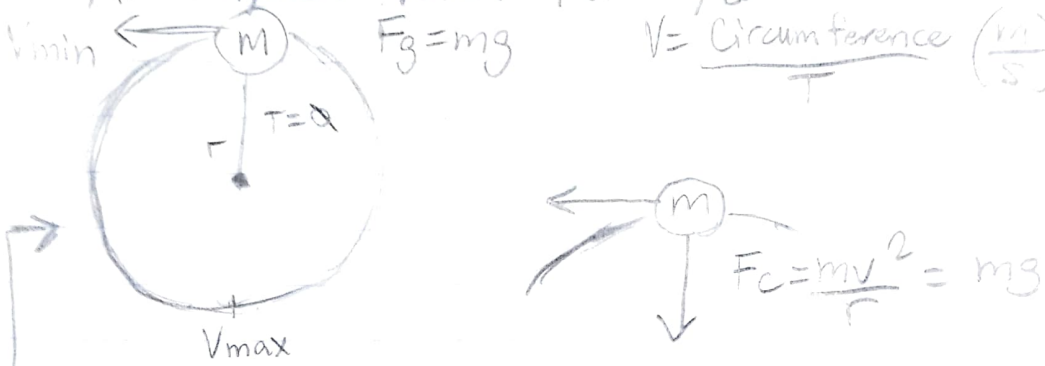
AP Physics Notes for 11/6 – Kinetic Energy



$F_g = mg$

$V = \frac{\text{Circumference}}{T}$ $\left(\frac{m}{s}\right)$

Kinetic Energy = Energy of Motion

$KE = \frac{1}{2}mv^2$

Concept of energy is tied to work. Energy is the ability to do work. There must be an applied force & something must move.

Work = Force • Distance

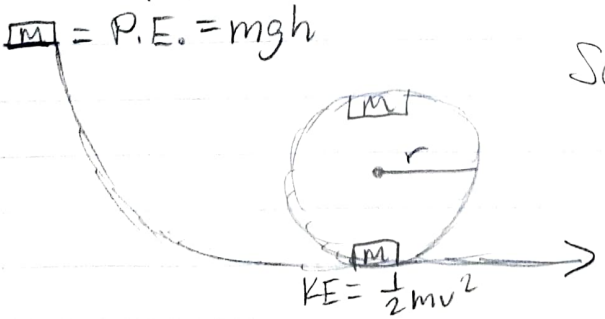
In work problems, to find distance, you must find velocity vector parallel to resultant vector.

P.E.g - potential energy due to gravity = mass x acceleration of gravity x height of object.

When V_{min} & V_{max} is found, average velocity can be calculated to get the period. Use KE to find energy at top, use P.E. to find how much it gains.

M = P.E. = mgh

Sample Problem



Once the mass reaches the bottom, the potential energy will become KE.