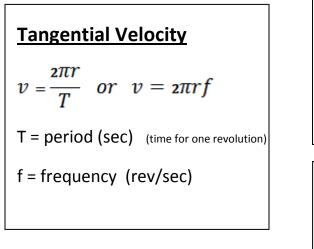
Circular Motion, Center of Gravity, Torque



$$\frac{Centripetal Acceleration}{a_c = \frac{v^2}{r}}$$

$$\frac{Centripetal Force}{F_c = ma_c = \frac{mv^2}{r}}$$

<u>Torque</u>

 $t = f \cdot d$

f= force perpendicular to lever arm

d= distance of lever arm

unit is a Nm

 $I = mr^2$

I = inertia m = mass r = radius

unit is a $kg \bullet m^2$

Angular Momentum

Angular momentum = mvr m = mass v = tangential velocity r = radius

unit is a $\frac{kg \bullet m^2}{s}$