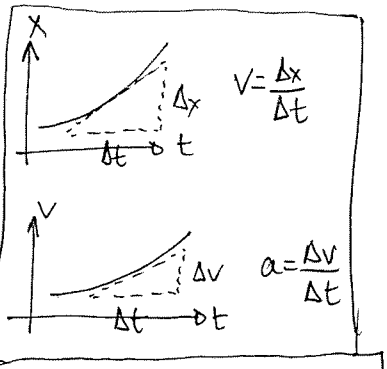
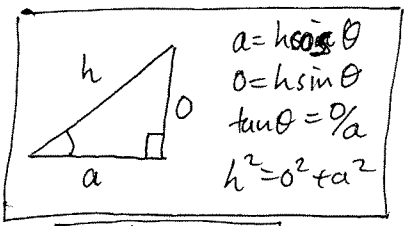




$a=$ constant

$x=x_0+v_0t+\frac{1}{2}at^2$

$v=v_0+at$

$x=x_0+\frac{1}{2}(v+v_0)t$

$v^2=v_0^2+2a(x-x_0)$

rot

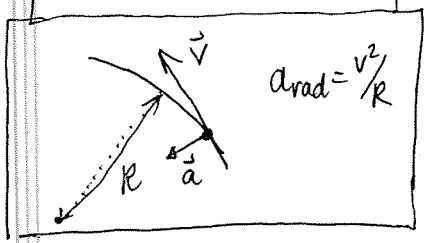
$a\to\alpha$

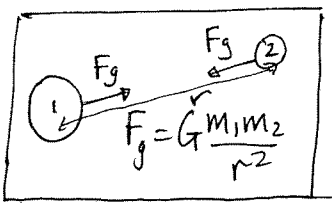
$x\to\theta$

$v\to\omega$

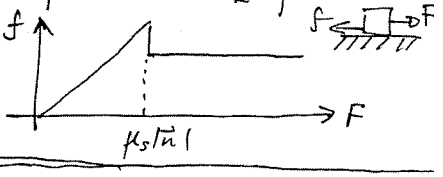
$t\to t$

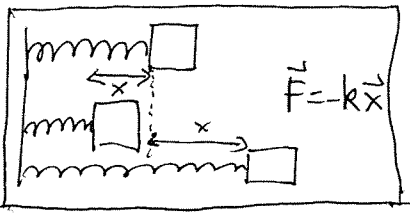
$\sum\vec{F}=m\vec{a}$ $\quad (W=mg)$

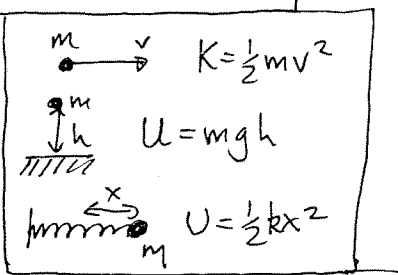




$f_s\le\mu_s|\vec{n}|$; $f_k=\mu_k|\vec{n}|$

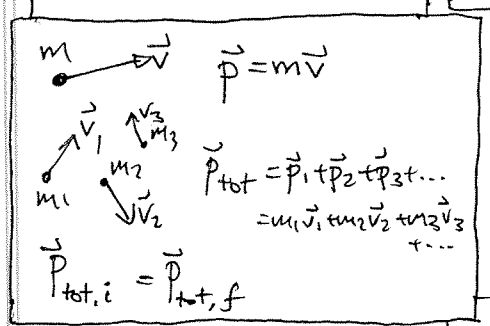


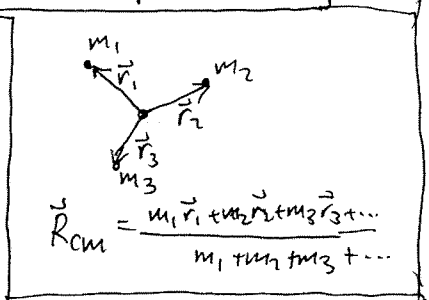


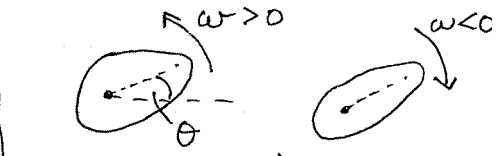


$K_i+U_i+W=K_f+U_f$

$W=F\Delta s\cos\theta$ $\quad (F=$ constant$)$

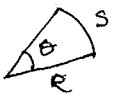






$\omega=\frac{\Delta\theta}{\Delta t}$ $\quad \alpha=\frac{\Delta\omega}{\Delta t}$

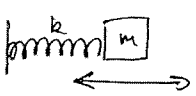
$s=R\theta$



$v=R\omega$

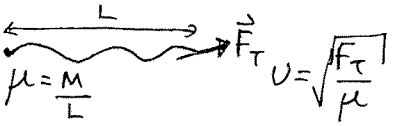
$a_{tan}=R\alpha$

$\omega=2\pi\cdot f=2\pi/T$



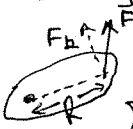
$\omega=\sqrt{\frac{k}{m}}$ "SHM"

$v=f\lambda$



$v=\sqrt{\frac{F_T}{\mu}}$

$K=\frac{1}{2}I\omega^2$; $L=I\omega$

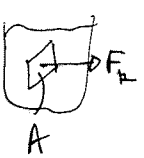


$\tau=F_\perp\cdot R$ $\quad \tau>0$ $\quad \tau<0$

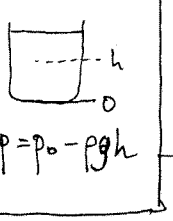
$\sum\tau=I\alpha$ $\quad (c.f.\ \sum\vec{F}=m\vec{a})$

$I=\sum_i m_i r_i^2$

m  $\rho=\frac{m}{V}$



$p=\frac{F_\perp}{A}$



$p=p_0-\rho gh$