$\Delta x = v_0 t + \frac{1}{2} a t^2$	$v = v_0 + at$	$v^2 = v_0^2 + 2a\Delta x$
$\sum \vec{F} = m\vec{a}$	$F_{fric} \le \mu F_N$	$F_g = G\frac{m_1 m_2}{r^2}$
$F_g = mg$	$\vec{p} = m\vec{v}$	$a = {v^2}/{r}$
$v_t = r\omega$	$a_t = r\alpha$	$\tau = RF\sin\theta = R_\perp F = RF_\perp$
$\sum \vec{\tau} = I\vec{\alpha}$	$KE = \frac{1}{2} m v^2$	$\Delta PE_g = mg\Delta y$
$W = Fd\cos\theta = F_\parallel d = Fd_\parallel$	$PE_s = \frac{1}{2} k x^2$	$P = {W}/{\Delta t}$
$\vec{F} = -k\vec{x}$	$T = 2\pi\sqrt{\frac{m}{k}}$	$T = 2\pi\sqrt{\frac{L}{g}}$
$\rho = {m}/{V}$	$F_{buoy} = \rho g V$	$P_1 + \frac{1}{2}\rho v_1^2 + \rho g y_1 = P_2 + \frac{1}{2}\rho v_2^2 + \rho g y_2$
$P = {F}/{A}$	$PV = nRT = Nk_B T$	$\Delta U = Q + W_{on\ system}$
$Q = mc\Delta T$	$Q = \pm mL$	$\Delta S = \frac{Q}{T}$
$v = f\lambda$	$f_o = f_s\left(\frac{v_{snd} \pm v_{obs}}{v_{snd} \mp v_{src}}\right)$	$n = {c}/{v}$
$n_1 \sin\theta_1 = n_2 \sin\theta_2$	$m\lambda = d\sin\theta$	$\frac{1}{f} = \frac{1}{d_o} + \frac{1}{d_i}$
$m = -\frac{d_i}{d_o}$	$F_e = k\frac{q_1 q_2}{r^2}$	$\vec{E} = \frac{\vec{F}}{q}$
$V = \frac{kq}{r}$	$V = {W}/{q}$	$\Delta V = -Ed\cos\theta = -E_\parallel d = -Ed_\parallel$
$PE_e = \frac{kq_1 q_2}{r}$	$Q = CV$	$PE = \frac{1}{2} C V^2$
$V = RI$	$P = IV$	$F = qvB\sin\theta = qvB_\perp$
$B = \frac{\mu_0 I}{2\pi r}$	$B = \mu_0 n I$	$F = ILB\sin\theta = ILB_\perp$
$E = \gamma m_0 c^2 = mc^2$	$E = hf$	$p = \frac{h}{\lambda}$

Moments of Inertia:

Solid disk or cylinder for a perpendicular axis through its center:	$I = {1}/{2}\, MR^2$
Thin rod about the center, perpendicular to rod:	$I = {1}/{12}\, MR^2$
Solid sphere about a diameter:	$I = {2}/{5}\, MR^2$