ANALOGS

LINEAR MOTION	ROTATIONAL MOTION
x	θ
v	ω
a	α
$x_f = x_i + v_i t + \frac{1}{2}at^2$	$\theta_f = \theta_i + \omega_i t + \frac{1}{2}\alpha t^2$
$v_f = v_i + at$	$\omega_f = \omega_i + \alpha t$
$v_f^2 = v_i^2 + 2a\Delta x$	$\omega_f^2 = \omega_i^2 + 2\alpha\Delta\theta$
$\vec{F}$	$\vec{\tau}$
$\Sigma\vec{F} = m\vec{a}$	$\Sigma\vec{\tau} = I\alpha$
m	I
$K = \frac{1}{2}mv^2$	$K_{rot} = \frac{1}{2}I\omega^2$
$W = \int F dx$	$W = \int \tau d\theta$
$P = Fv$	$P = \tau\omega$
$\vec{p}$	$\vec{L}$
$\Sigma\vec{F} = \frac{d\vec{p}}{dt}$	$\Sigma\tau = \frac{d\vec{L}}{dt}$
$\vec{p} = m\vec{v}$	$\vec{L} = I\vec{\omega}$