Rotational Motion

$\tau_{net} = I\alpha$	$\tau = r F \sin\theta$	$\tau = rF$

Linear to Rotational Conversions

$x = r\theta$	$v = r\omega$	$a = r\alpha$

Rotational Kinematics

$\Delta\theta = \omega i t + \frac{1}{2}\alpha t^2$	$\omega = \omega i + \alpha t$	$\omega^2 = \omega i^2 + 2\alpha\Delta\theta$

Rotational Momentum

$L = I\omega$	$K = \frac{1}{2}I\omega^2$	$\Delta L = \tau\Delta t$

Momentum

When Momentum is Conversed:	$\sum pi = \sum pf$

$p = mv$	$\Delta p = F\Delta t$ or $J = F\Delta t$
Elastic Collision (KE conserved, p conserved)	$m1v1 + m2v2 = m1v3 + m2v4$

Momentum

When Momentum is Conversed:	$\sum pi = \sum pf$