

Cinemática (MRU e MRUV)			
$v_m = \frac{\Delta x}{\Delta t}$	$v = \frac{dx}{dt}$	$x_2 = x_1 + v\Delta t$	$g = 9,8 \text{ m/s}^2$
$a_m = \frac{\Delta v}{\Delta t}$	$a = \frac{dv}{dt}$	$v_2 = v_1 + a\Delta t$	$x_2 - x_1 = \frac{v_1 + v_2}{2}\Delta t$
$v_2^2 = v_1^2 + 2a\Delta x$		$x_2 = x_1 + v_1\Delta t + \frac{a\Delta t^2}{2}$	$1 \text{ m/s} = 3,6 \text{ km/h}$
Dinâmica (Leis de Newton, atrito, vetores)			
$F = ma$		$F_{at} = \mu N$	$r^2 = u^2 + v^2 + 2uv\cos\alpha$
Movimento circular (MCU)			
$T = \frac{1}{f}$		$s = \phi r$	$\omega = \frac{\Delta\phi}{\Delta t} = 2\pi f = \frac{2\pi}{T}$
$v = \omega r$		$\phi = \phi_0 + \omega\Delta t$	$a_{cp} = \frac{v^2}{r} = \omega^2 r$
$F_{cp} = ma_{cp} = m\omega^2 r$		$F_{cp} = \frac{mv^2}{r}$	$\omega_1 r_1 = \omega_2 r_2$
Quantidade de movimento e Impulso			
$\vec{Q} = m \cdot \vec{v}$		$\vec{Q}_T = \vec{Q}_1 + \vec{Q}_2 + \dots + \vec{Q}_n$	$Q_{inicial} = Q_{final}$
$e = \frac{v_{f_1} - v_{f_2}}{v_{i_2} - v_{i_1}}$		$\vec{I} = \vec{F} \cdot d$	$\vec{I} = \Delta\vec{Q}$
Trabalho, potência, energia e conservação de energia			
$\tau = F \cdot \Delta x \cdot \cos \alpha$		$P = \frac{\tau}{\Delta t} = Fv$	$E_m = E_c + E_g + E_{el}$
$E_c = \frac{mv^2}{2}$		$E_g = mgh$	$E_{el} = \frac{kx^2}{2}$
$E_{m_{inicial}} = E_{m_{final}}$		$F_{el} = k \cdot x$	$1 \text{ CV} = 735 \text{ J/s}$
Centro de gravidade e equilíbrio			
$\bar{x} = \frac{\sum(m_i \cdot x_i)}{\sum m_i}$		$\bar{y} = \frac{\sum(m_i \cdot y_i)}{\sum m_i}$	$\sum M_t = 0$