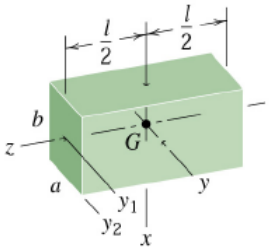
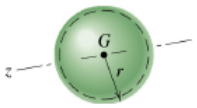
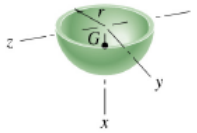
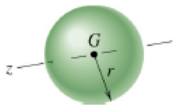
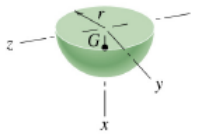
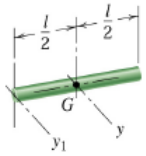
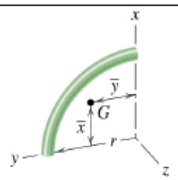
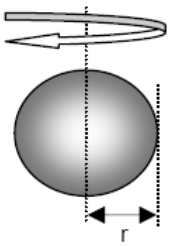
F O R M U L Á R I O

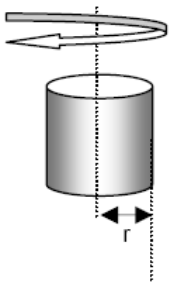
$R = \int_{x_A}^{x_B} p dx$	$x' = \dfrac{\int_{x_A}^{x_B} x p dx}{R}$
$(x_C, y_C, z_C) = \dfrac{\sum_{i=1}^{n} (x_C, y_C, z_C)_i A_i}{A}$	$(x_M, y_M, z_M) = \dfrac{\sum_{i=1}^{n} (x_M, y_M, z_M)_i M_i}{M}$
$(x_G, y_G, z_G) = \dfrac{\sum_{i=1}^{n} (x_G, y_G, z_G)_i P_i}{P}$	$(x_C, y_C, z_C) = \dfrac{\int_A (x, y, z) dA}{A}$
$(x_M, y_M, z_M) = \dfrac{\int_m (x, y, z) dm}{m} = \dfrac{\int_V (x, y, z) \rho dV}{m}$	$(x_G, y_G, z_G) = \dfrac{\int_V (x, y, z) \gamma dV}{P}$
$I_O = \int_A r^2 dA$	$I_x = \int_A y^2 dA$
$I_y = \int_A x^2 dA$	$I_{xy} = \int_A xy dA$
$I = \dfrac{\pi c^4}{4}$	$I = \dfrac{bh^3}{12}$
$I_x = I_{x'} + (y_C)^2 A$	$I_x = \sum_{i=1}^{n} (I_x)_i$
$I_{xy} = I_{x'y'} + x_C y_C A$	$I_{x'} = \dfrac{I_x + I_y}{2} + \dfrac{I_x - I_y}{2} \cos 2\theta - I_{xy} sen 2\theta$
$I_{x'y'} = \dfrac{I_x - I_y}{2} sen 2\theta + I_{xy} \cos 2\theta$	$tg\, 2\theta_1 = \dfrac{-2 I_{xy}}{I_x - I_y}$
$J_x = \int_m (y^2 + z^2) dm = \int_V (y^2 + z^2) \rho dV$	$J_x = J_{x'} + m(y_G^2 + z_G^2)$
$J_x = \sum_{i=1}^{n} (J_x)_i$	$p(z) = \gamma z = \rho g z$
$\delta W = \vec{F}_1 \cdot d\vec{s}_1 + \vec{F}_2 \cdot d\vec{s}_2 + \cdots + \vec{F}_n \cdot d\vec{s}_n = 0$	

MOMENTOS DE INÉRCIA DE MASSA PARA ALGUNS SÓLIDOS

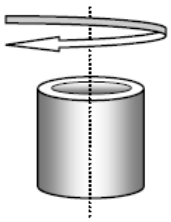
	Paralelepípedo rectangular		$I_{xx}=\frac{1}{12}m.(a^2+l^2)$ $I_{yy}=\frac{1}{12}m.(b^2+l^2)$ $I_{zz}=\frac{1}{12}m.(a^2+b^2)$ $I_{y_1y_1}=\frac{1}{12}m.b^2+\frac{1}{3}m.l^2$ $I_{y_2y_2}=\frac{1}{3}m.(b^2+l^2)$
	Casca esférica		$I_{zz}=\frac{2}{3}m.r^2$
	Casca hemisférica	$\overline{x}=\frac{r}{2}$	$I_{xx}=I_{yy}=I_{zz}=\frac{2}{3}m.r^2$ $\overline{I}_{yy}=\overline{I}_{zz}=\frac{5}{12}m.r^2$
	Esfera		$I_{zz}=\frac{2}{5}m.r^2$
	Hemisfera	$\overline{x}=\frac{3.r}{8}$	$I_{xx}=I_{yy}=I_{zz}=\frac{2}{5}m.r^2$ $\overline{I}_{yy}=\overline{I}_{zz}=\frac{83}{320}m.r^2$
	Barra delgada uniforme		$I_{yy}=\frac{1}{12}m.l^2$ $I_{y_1y_1}=\frac{1}{3}m.l^2$
	Barra quadrante circular	$\overline{x}=\overline{y}=\frac{2.r}{\pi}$	$I_{xx}=I_{yy}=\frac{1}{2}m.r^2$ $I_{zz}=m.r^2$



$I=\frac{2}{5}m.r^2$



$I=\frac{1}{2}m.r^2$



$I=\frac{1}{2}m.(r_1^2+r_2^2)$