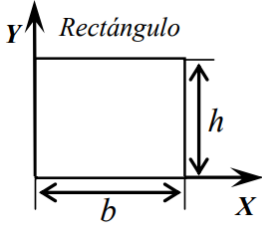
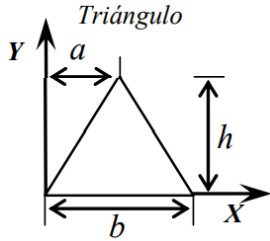
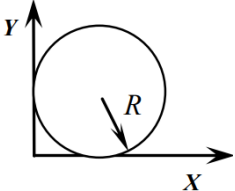
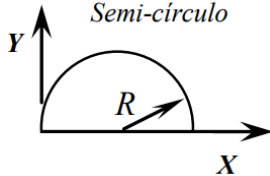
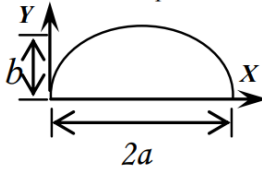


TABLA DE CENTROIDE E INERCIAS

FIGURA	ÁREA Y CENTROIDE	MOMENTO DE INERCIA
 <p style="text-align: center;"><i>Rectángulo</i></p>	$A = bh$ $\bar{X} = \frac{b}{2}$ $\bar{Y} = \frac{h}{2}$	$I_X = \frac{bh^3}{3} ; I_Y = \frac{b^3h}{3}$ $I_{Xc} = \frac{bh^3}{12}$ $I_{Yc} = \frac{b^3h}{12}$
 <p style="text-align: center;"><i>Triángulo</i></p>	$A = \frac{bh}{2}$ $\bar{X} = \frac{a+b}{3}$ $\bar{Y} = \frac{h}{3}$	$I_X = \frac{bh^3}{12} ; I_{Xc} = \frac{bh^3}{36}$ $I_Y = \frac{bh}{12}(b^2 + ab + a^2)$ $I_{Yc} = \frac{bh}{36}(b^2 - ab + a^2)$
 <p style="text-align: center;"><i>Círculo</i></p>	$A = \pi R^2$ $\bar{X} = R$ $\bar{Y} = R$	$I_X = \frac{5\pi R^4}{4} ; I_Y = \frac{5\pi R^4}{4}$ $I_{Xc} = \frac{\pi R^4}{4}$ $I_{Yc} = \frac{\pi R^4}{4}$
 <p style="text-align: center;"><i>Semi-círculo</i></p>	$A = \frac{\pi R^2}{2}$ $\bar{X} = R$ $\bar{Y} = \frac{4R}{3\pi}$	$I_X = \frac{\pi R^4}{8} ; I_Y = \frac{5\pi R^4}{8}$ $I_{Xc} = \frac{R^4(9\pi^2 - 64)}{72\pi}$ $I_{Yc} = \frac{\pi R^4}{8}$
 <p style="text-align: center;"><i>Semi-elipse</i></p>	$A = \frac{\pi ab}{2}$ $\bar{X} = a$ $\bar{Y} = \frac{4b}{3\pi}$	$I_X = \frac{\pi ab^3}{8} ; I_Y = \frac{5\pi a^3 b}{8}$ $I_{Xc} = \frac{ab^3(9\pi^2 - 64)}{72\pi} ; I_{Yc} = \frac{\pi a^3 b}{8}$

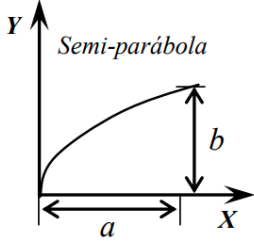
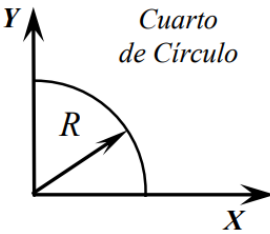
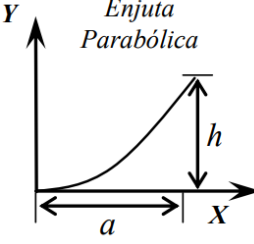
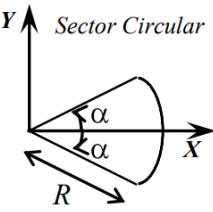
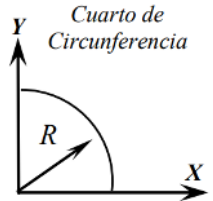
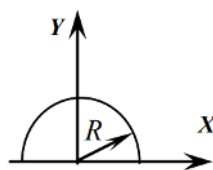
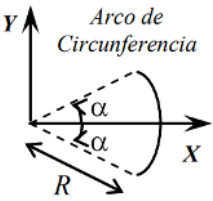



 <p>Semi-parábola</p>	$A = \frac{2ab}{3}$ $\bar{X} = \frac{3a}{5}$ $\bar{Y} = \frac{3b}{8}$	$I_x = \frac{2ab^3}{15} ; I_y = \frac{2a^3b}{7}$ $I_{x_c} = \frac{19ab^3}{480}$ $I_{y_c} = \frac{8a^3b}{175}$
 <p>Cuarto de Círculo</p>	$A = \frac{\pi R^2}{4}$ $\bar{X} = \frac{4R}{3\pi}$ $\bar{Y} = \frac{4R}{3\pi}$	$I_x = \frac{\pi R^4}{16} ; I_y = \frac{\pi R^4}{16}$ $I_{x_c} = \frac{R^4(9\pi^2 - 64)}{144\pi}$ $I_{y_c} = \frac{R^4(9\pi^2 - 64)}{144\pi}$
 <p>Enjuta Parabólica</p>	$A = \frac{ah}{3}$ $\bar{X} = \frac{3a}{4}$ $\bar{Y} = \frac{3h}{10}$	$I_x = \frac{ah^3}{21} ; I_y = \frac{a^3h}{5}$ $I_{x_c} = \frac{37ah^3}{2100}$ $I_{y_c} = \frac{a^3h}{80}$
 <p>Sector Circular</p>	$A = \alpha R^2$ $\bar{X} = \frac{2R \text{sen} \alpha}{3\alpha}$ $\bar{Y} = 0$	$I_x = I_{x_c} = \frac{R^4}{4} (\alpha - \text{Sen} \alpha \text{ Cos} \alpha)$ $I_y = \frac{R^4}{4} (\alpha + \text{Sen} \alpha \text{ Cos} \alpha)$ $I_{y_c} = \frac{R^4}{4} (\alpha + \text{Sen} \alpha \text{ Cos} \alpha) - \left(\frac{2R \text{Sen} \alpha}{3\alpha} \right)^2 \alpha R^2$

TABLA DE CENTROIDE DE LINEA		
FIGURA	LONGITUD	CENTROIDE
<p><i>Cuarto de Circunferencia</i></p> 	$L = \frac{\pi R}{2}$	$\bar{X} = \frac{2R}{\pi}$ $\bar{Y} = \frac{2R}{\pi}$
<p><i>Semi-circunferencia</i></p> 	$L = \pi R$	$\bar{X} = 0$ $\bar{Y} = \frac{2R}{\pi}$
<p><i>Arco de Circunferencia</i></p> 	$L = \pi R$	$\bar{X} = \frac{R \text{ Sen } \alpha}{\alpha}$ $\bar{Y} = 0$

LOS MONSTRUOS EDUCACIÓN
TUTORÍAS EN MATEMÁTICAS|CÁLCULO|FÍSICA|QUÍMICA Y MÁS

+57 3233090150 
 @losmonstruos_ 
 Los.Monstruos 
www.losmonstruoseducacion.com 