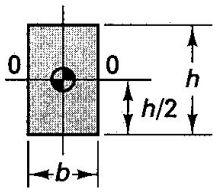
TABLA PROPIEDADES ÚTILES DE ÁREAS

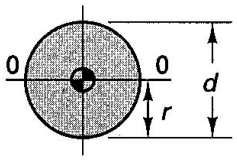
Áreas y momentos de inercia de áreas respecto a ejes centroidales

RECTÁNGULO



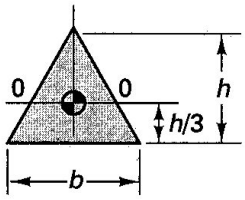
$A = bh$
$I_o = bh^3/12$

CÍRCULO



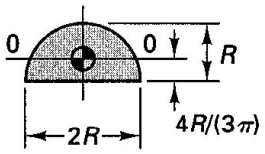
$A = \pi R^2$
$I_o = I_p/2 = \pi R^4/4$

TRIÁNGULO



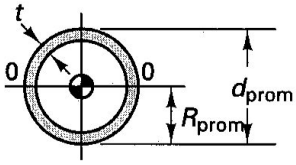
$A = bh/2$
$I_o = bh^3/36$

SEMICÍRCULO



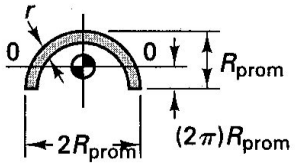
$A = \pi R^2/2$
$I_o = 0.110R^4$

TUBO DELGADO



$A = 2\pi R_{prom} t$
$I_o = I_p/2 \approx \pi R_{prom} t$

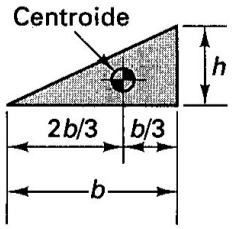
MEDIO TUBO DELGADO



$A = \pi R_{prom} t$
$I_o \approx 0.095\pi R_{prom}^3 t$

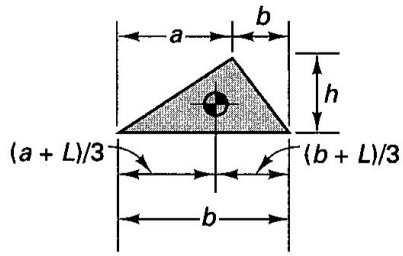
Áreas y centroides de áreas

TRIÁNGULO



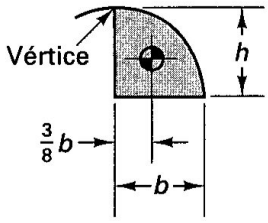
$A = bh/2$

TRIÁNGULO



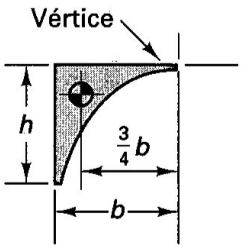
$A = hL/2$

PARÁBOLA



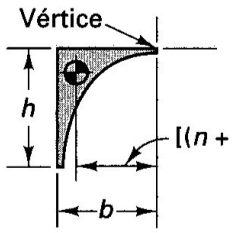
$A = \frac{2}{3}bh$

PARÁBOLA: $y = -ax^2$



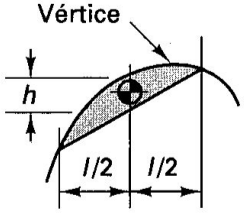
$A = bh/3$

$y = -ax^n$



$A = bh/(n + 1)$

PARÁBOLA



El área de cualquier segmento de una parábola es $A = \frac{2}{3}hl$