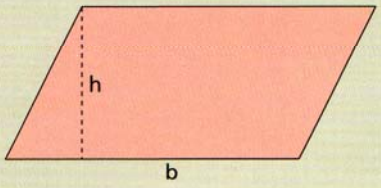
GEOMETRÍA

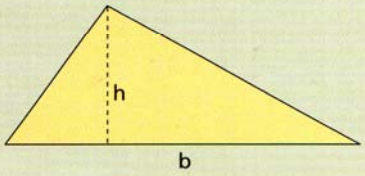
Paralelogramo

Área: $A = b \cdot h$



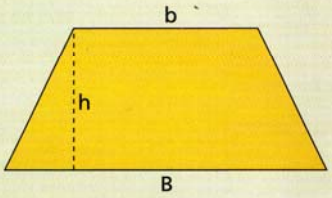
Triángulo

Área: $A = \frac{b \cdot h}{2}$



Trapecio

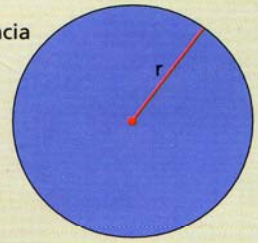
Área: $A = \frac{B + b}{2} \cdot h$



Circunferencia-Círculo

Longitud de la circunferencia
$L = 2 \cdot \pi \cdot r$

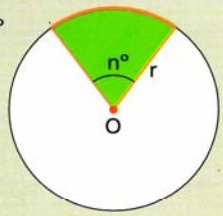
Área del círculo
$A = \pi \cdot r^2$



Arco y sector circular

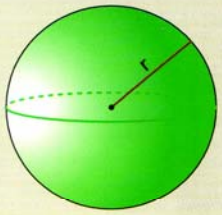
Longitud del arco
$L = 2 \cdot \pi \cdot r \cdot \frac{n°}{360°}$

Área del sector circular
$A = \pi \cdot r^2 \cdot \frac{n°}{360°}$



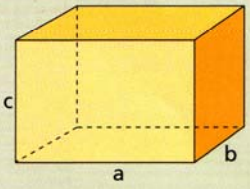
Superficie esférica y esfera

$A = 4 \cdot \pi \cdot r^2$
$V = \frac{4}{3} \cdot \pi \cdot r^3$



Ortoedro

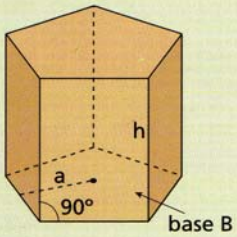
$A = 2 \cdot a \cdot b + 2 \cdot a \cdot c + 2 \cdot b \cdot c$
$V = a \cdot b \cdot c$



Prisma regular

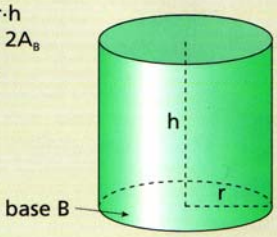
a = apotema
p = perímetro de la base

$A_B = \frac{p \cdot a}{2}$
$A_L = p \cdot h$
$A_T = A_L + 2A_B$
$V = A_B \cdot h$

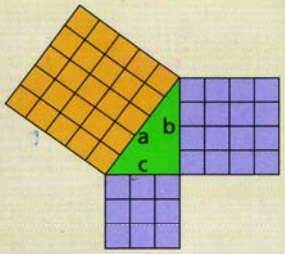


Cilindro

$A_B = \pi \cdot r^2$
$A_L = 2 \cdot \pi \cdot r \cdot h$
$A_T = A_L + 2A_B$
$V = A_B \cdot h$



Teorema de Pitágoras

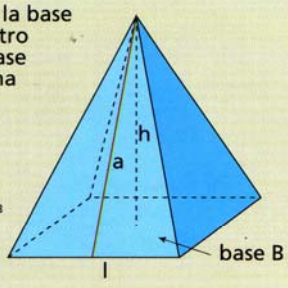


$a^2 = b^2 + c^2$

Pirámide regular

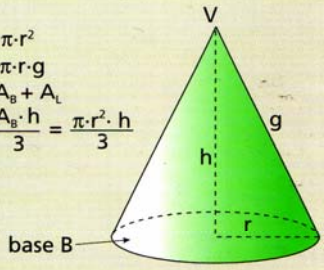
l = lado de la base
p = perímetro de la base
a = apotema

$A_B = l^2$
$A_L = \frac{p \cdot a}{2}$
$A_T = A_L + A_B$
$V = \frac{A_B \cdot h}{3}$

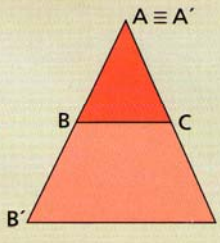


Cono

$A_B = \pi \cdot r^2$
$A_L = \pi \cdot r \cdot g$
$A_T = A_B + A_L$
$V = \frac{A_B \cdot h}{3} = \frac{\pi \cdot r^2 \cdot h}{3}$



Teorema de Tales

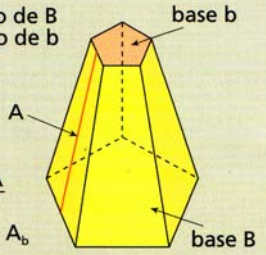


$BC \parallel B'C' \iff ABC$ y $A'B'C'$ semejantes

Tronco de pirámide regular

P = perímetro de B
p = perímetro de b

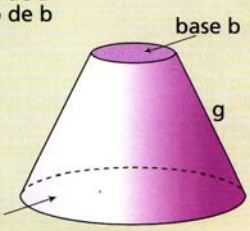
$A_L = \frac{(P + p) \cdot A}{2}$
$A_T = A_L + A_B + A_b$



Tronco de cono

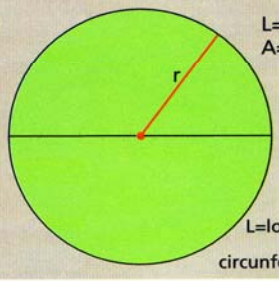
P = perímetro de B
p = perímetro de b

$A_L = \frac{(P + p) \cdot g}{2}$
$A_T = A_L + A_B + A_b$



GEOMETRÍA DEL PLANO

Circunferencia-Círculo

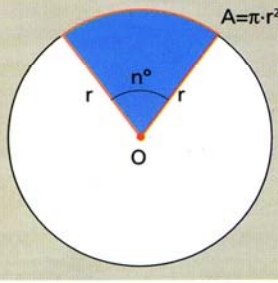


$L=2\cdot\pi\cdot r$

$A=\pi\cdot r^2$

L=longitud de la circunferencia

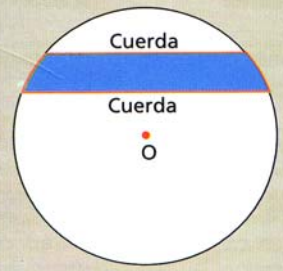
Sector circular



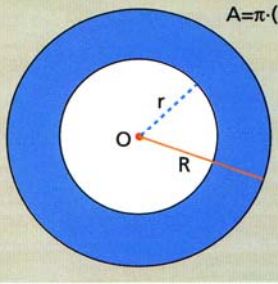
$A=\pi\cdot r^2\cdot\frac{n°}{360°}$

Segmento circular

Zona circular

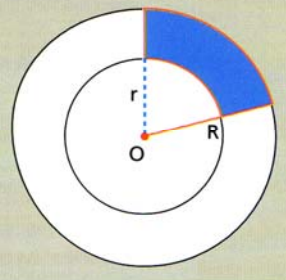


Corona circular



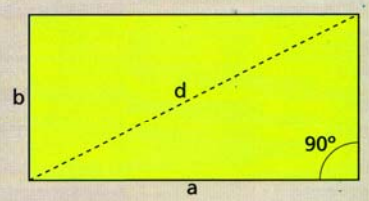
$A=\pi\cdot(R^2-r^2)$

Trapecio circular



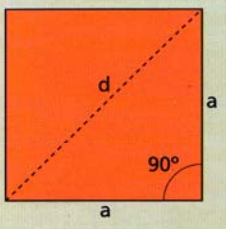
Rectángulo

Área: $A=a\cdot b$



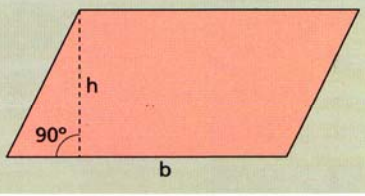
Cuadrado

Área: $A=a^2$



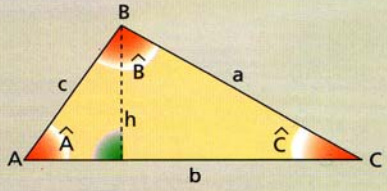
Paralelogramo

Área: $A=b\cdot h$



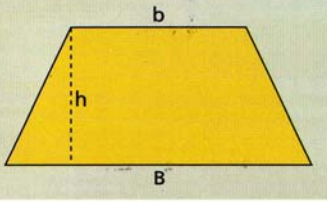
Triángulo

Área: $A=\frac{b\cdot h}{2}$



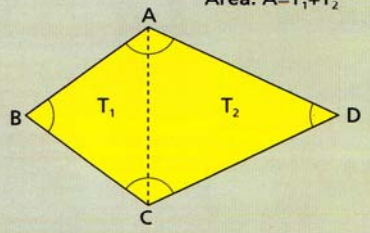
Trapecio

Área: $A=\frac{B+b}{2}\cdot h$



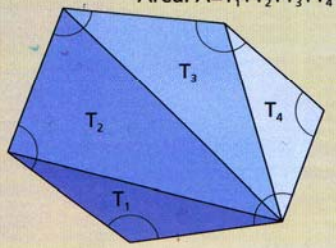
Cuadrilátero

Área: $A=T_1+T_2$



Polígono

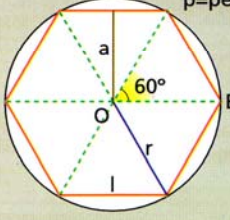
Área: $A=T_1+T_2+T_3+T_4$



Polígono regular

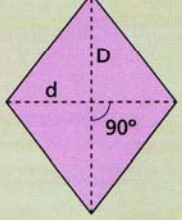
Área: $A=\frac{6\cdot l\cdot a}{2}=\frac{p\cdot a}{2}$

l=lado
a=apotema
p=perímetro



Rombo

d=diagonal menor
D=diagonal mayor

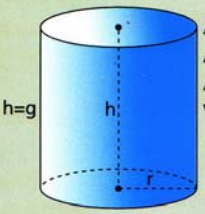


$A=\frac{D\cdot d}{2}$

GEOMETRÍA DEL ESPACIO

Cuerpos redondos

Cilindro



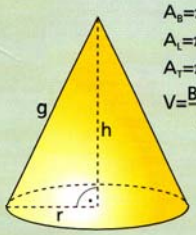
$A_B=\pi\cdot r^2$

$A_L=2\cdot\pi\cdot r\cdot h$

$A_T=2\cdot\pi\cdot r\cdot h+2\cdot\pi\cdot r^2$

$V=B\cdot h=\pi\cdot r^2\cdot h$

Cono



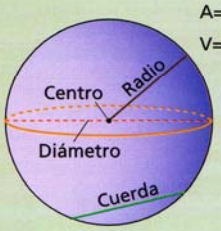
$A_B=\pi\cdot r^2$

$A_L=\pi\cdot r\cdot g$

$A_T=\pi\cdot r\cdot g+\pi\cdot r^2$

$V=\frac{B\cdot h}{3}=\frac{\pi\cdot r^2\cdot h}{3}$

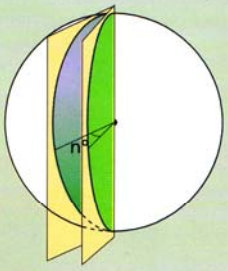
Superficie esférica y esfera



$A=4\cdot\pi\cdot r^2$

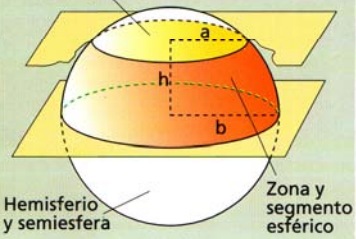
$V=\frac{4}{3}\cdot\pi\cdot r^3$

Huso y cuña



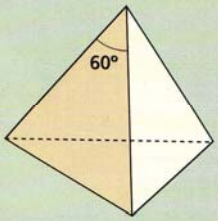
En la esfera

Casquete y casquete esférico

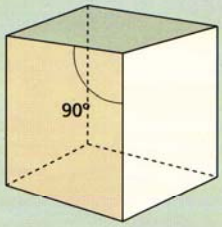


Los poliedros regulares

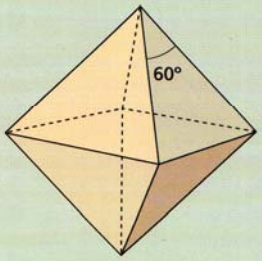
Tetraedro (4 caras)



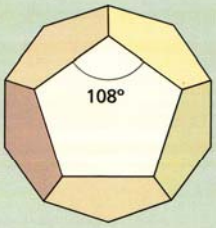
Cubo (6 caras)



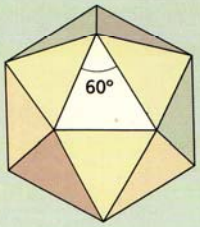
Octaedro (8 caras)



Dodecaedro (12 caras)



Icosaedro (20 caras)

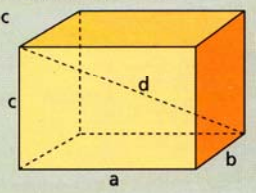


Poliedros: Áreas y volúmenes

Ortoedro

$A=2\cdot a\cdot b+2\cdot a\cdot c+2\cdot b\cdot c$

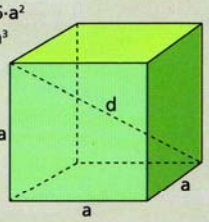
$V=a\cdot b\cdot c$



Cubo

$A=6\cdot a^2$

$V=a^3$



Prisma regular

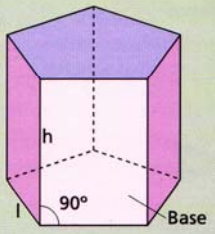
l=lado

p=perímetro de la base

$A_L=p\cdot h$

$A_T=A_L+A_B$

$V=B\cdot h$



Pirámide regular

l=lado

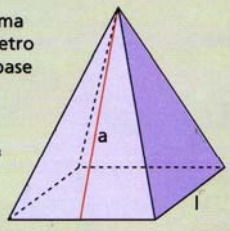
a=apotema

p=perímetro de la base

$A_L=\frac{p\cdot a}{2}$

$A_T=A_L+A_B$

$V=\frac{B\cdot h}{3}$



Volumen y capacidad

Equivalencias

Capacidad	kl	l	ml
Volumen	m^3	dm^3	cm^3