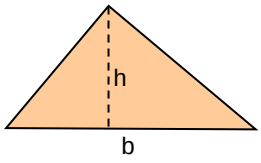
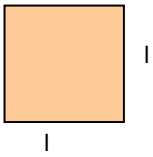
## ÁREAS

### Triángulo:



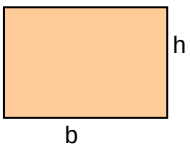

$$A = \frac{b \cdot h}{2}$$

### Cuadrado:



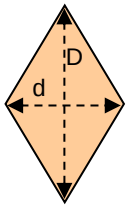

$$A = l^2$$

### Rectángulo:




$$A = b \cdot h$$

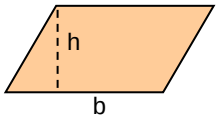
### Rombo:




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

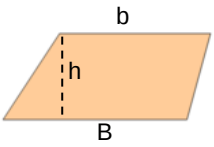
(semiproducto de las diagonales)

### Paralelogramo: (Romboide[1])




$$A = b \cdot h$$

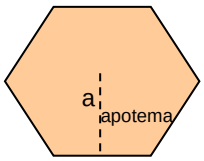
### Trapecio:




$$A = \frac{B + b}{2} \cdot h$$

(semisuma de las bases por altura)

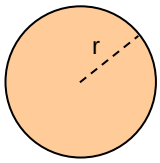
### Polígonos regulares:




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

(semiproducto de perímetro y apotema)

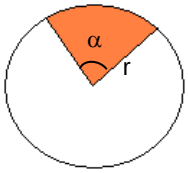
### Circunferencia:




Área = $\pi r^2$

Longitud = $2 \pi r$

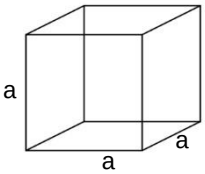
### Sector circular:




$$A = \frac{\pi r^2 \alpha}{360}$$

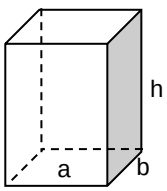
## VOLÚMENES

### Prismas:

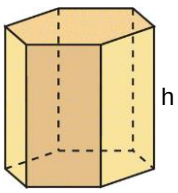



CUBO

$V=a^3$



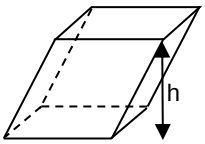

PRISMA CUADRANGULAR RECTO (ORTOEDRO) $V=a\ b\ h$




PRISMA HEXAGONAL RECTO

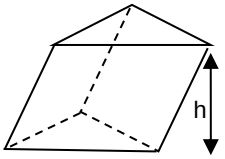
$$V = A_{base} \cdot h$$

$$A = A_{lateral} + 2 \cdot A_{base}$$




PRISMA CUADRANGULAR OBLICUO

PARALELEPÍPEDO

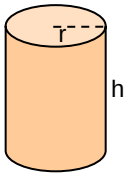



PRISMA TRIANGULAR OBLICUO

[1] En realidad, podemos considerar cuatro tipos de paralelogramos: cuadrado, rectángulo, rombo y romboide; por lo tanto, en puridad un romboide sería un paralelogramos que no es ni cuadrado ni rectángulo ni rombo…

# VOLÚMENES

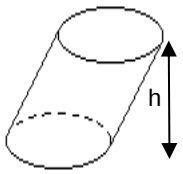
## Cilindros:




CILINDRO (CIRCULAR) RECTO

$$V = A_{base} \cdot h = \pi r^2 h$$

$$A = A_{lateral} + 2 \cdot A_{base} = 2\pi rh + 2\pi r^2$$



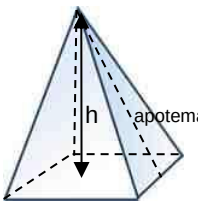

CILINDRO OBLICUO

$$V = A_{base} \cdot h$$

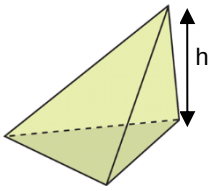
(La base puede ser un círculo o una elipse)

$$A = A_{lateral} + 2 \cdot A_{base}$$

## Pirámides:




PIRÁMIDE CUADRANGULAR RECTA

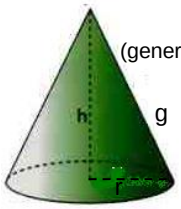



PIRÁMIDE TRIANGULAR OBLICUA

$$V = \frac{1}{3} A_{base} \cdot h$$

$$A = A_{lateral} + A_{base}$$

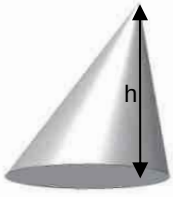
## Conos:




CONO (CIRCULAR) RECTO

$$V = \frac{1}{3} A_{base} \cdot h = \frac{1}{3} \pi r^2 h$$

$$A = A_{lateral} + A_{base} = \pi rg + \pi r^2$$



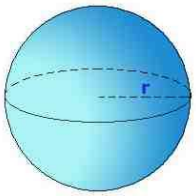

CONO OBLICUO

$$V = \frac{1}{3} A_{base} \cdot h$$

(La base puede ser un círculo o una elipse)

$$A = A_{lateral} + A_{base}$$

## Esfera:




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

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