# Figuras Geométricas I

## Apoyos Visuales-Geometría

*By Miss Mony*

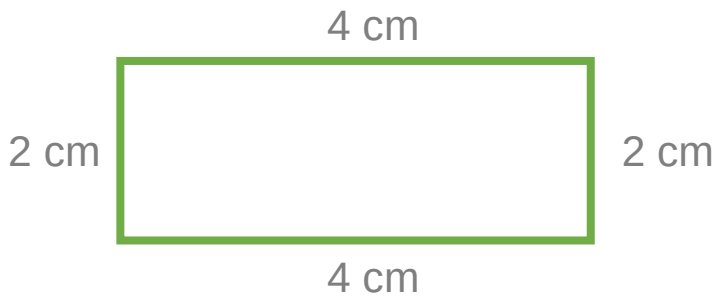
4APRENDERA®

APOYOS VISUALES, 4APRENDERA ®

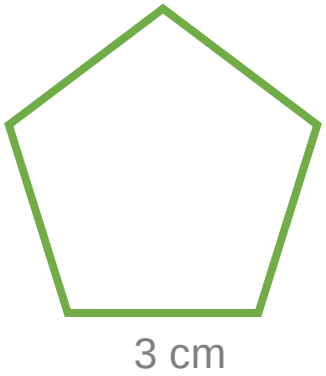
Edición: 4APRENDERA ®, 2024
AUTORES:
Rodríguez Galván Mónica María
Ramírez de Arellano López Johanna
Martínez Rodríguez Luis Manuel
Mendoza Tapia Miguel Ángel
Navarro Ruíz Tubal Caín

# Perímetro

El perímero de una figura es la medida de su contorno.



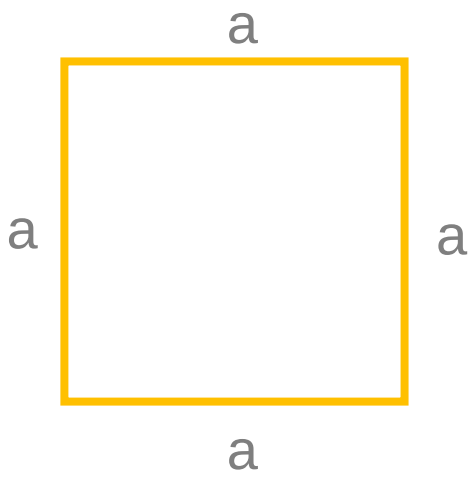

Perímetro
4 cm + 2 cm + 4 cm + 2 cm = 12 cm




Perímetro
5 x 3 cm = 15 cm

# Perímetro

Expresiones del perímetro son **equivalentes** si siempre dan el mismo resultado.




$P_1 = a + a + a + a = \mathbf{4a}$

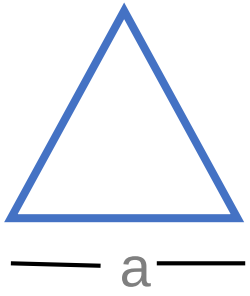
$P_2 = 4 \times a = \mathbf{4a}$

$P_3 = 2a + 2a = \mathbf{4a}$

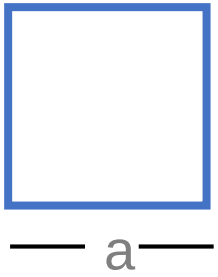
Las tres expresiones son equivalentes

Estas expresiones se llaman **expresiones algebráicas**.

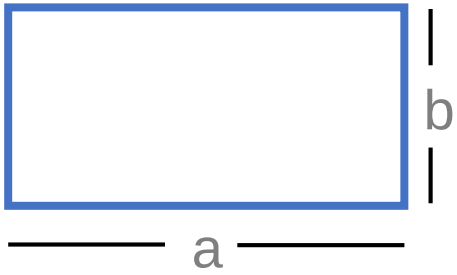
# Perímetro



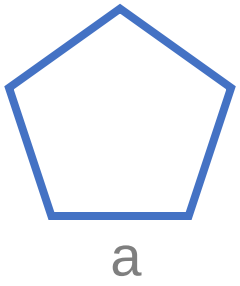

P = **3a**



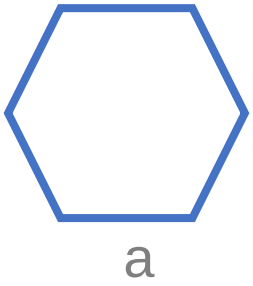

P = **4a**



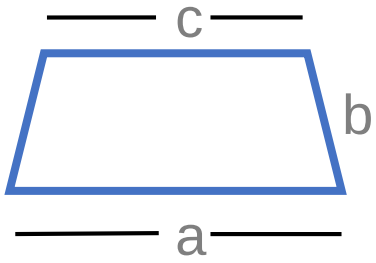

P = **2a + 2b**



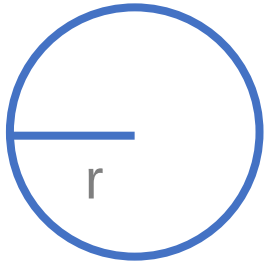

P = **5a**




P = **6a**




P = **a + 2b + c**



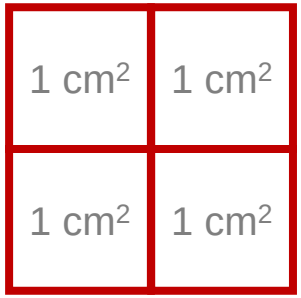

P = **2πr**

4APRENDERA®

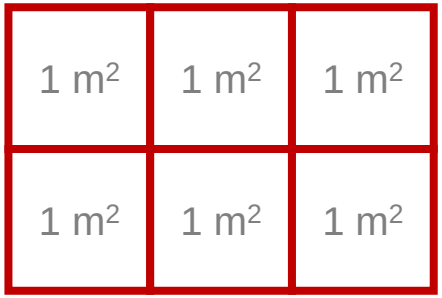
# Área

El área de una figura es la cantidad de unidades de superficie que caben en su superficie.


Las unidades más usadas para el área son el $cm^2$ y $m^2$.




Área = 4 $cm^2$




Área = 6 $m^2$

4APRENDERA®

# Área

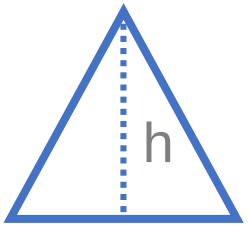
Existen expresiones algebráicas equivalentes para el área.


$A_1 = s \times t$

$A_2 = st$

Las dos expresiones son equivalentes pero usamos la dos por convención.

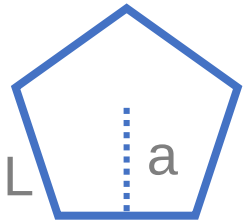
# Área



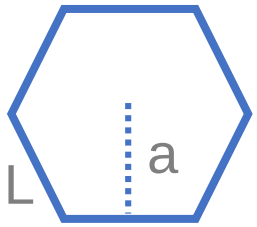

$A = \frac{b \cdot h}{2}$


$A = L^2$

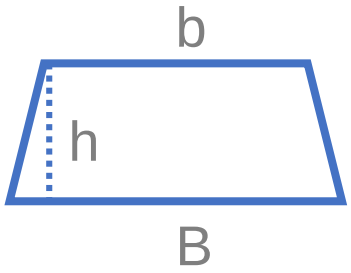

$A = bh$



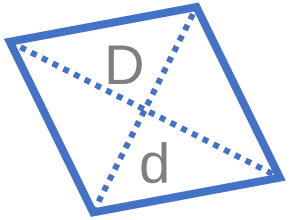

$A = \frac{5 \cdot L \cdot a}{2}$



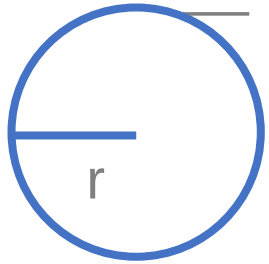

$A = \frac{6 \cdot L \cdot a}{2}$




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




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

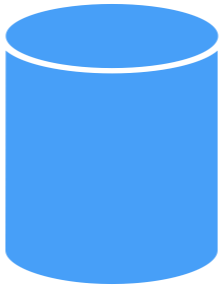



$A = \pi r^2$

4APRENDERA®

# Volumen

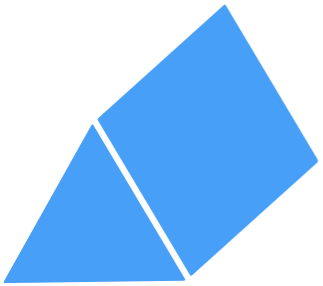
Pirámide



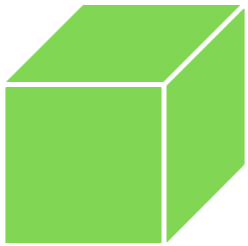
Cilindro

Cono

Esfera



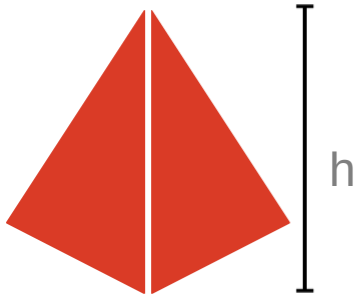
Prisma triangular



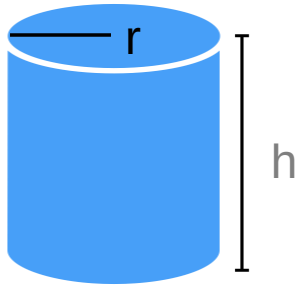
Cubo

Prisma cuadrangular

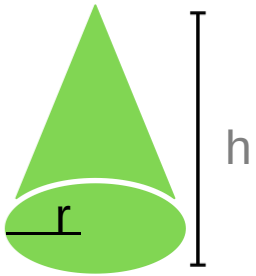
# Volumen



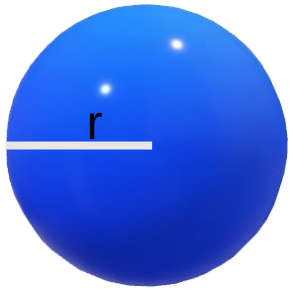

$$V = \frac{A_{base} h}{3}$$



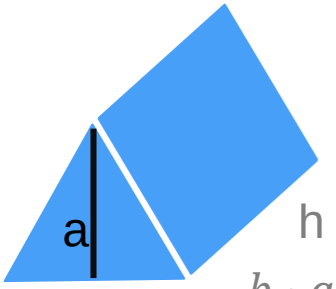

$$V = \pi r^2 h$$



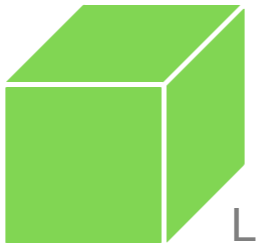

$$V = \frac{\pi r^2 h}{3}$$



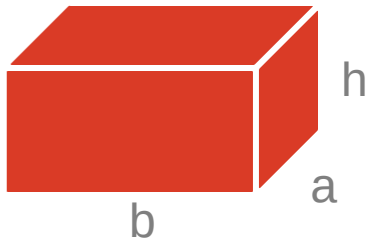

$$V = \frac{4\pi r^3}{3}$$




$$V = \frac{b \cdot a \cdot h}{2}$$




$$V = L^3$$




$$V = b \cdot a \cdot h$$

4APRENDERA®

# Equivalencias Volumen

| Equivalencias $m^3$ | | |
|---|---|---|
| **Unidad** | **Símbolo** | **Equivalencia** |
| Kilometro$^3$ | $km^3$ | 1 000 000 000 $m^3$ |
| Metro$^3$ | $m^3$ | 1 $m^3$ |
| Decímetro$^3$ | $dm^3$ | 0.01 $m^3$ |
| Centímetro$^3$ | $cm^3$ | 0.000001 $m^3$ |
| Milímetro$^3$ | $mm^3$ | 0.000000001 $m^3$ |
| Pie$^3$ | $ft^3$ | 0.02832 $m^3$ |
| Yarda$^3$ | $yd^3$ | 0.765 $m^3$ |

| Equivalencias litro | | |
|---|---|---|
| **Unidad** | **Símbolo** | **Equivalencia** |
| Kilolitro | Kl | 1 000 l |
| Hectolitro | Hl | 100 l |
| Decalitro | Dl | 10 l |
| Litro | l | 1 l |
| Decilitro | dl | 0.1 l |
| Centilitro | cl | 0.01 l |
| Mililitro | ml | 0.001 l |

| Equivalencia volumen - capacidad | |
|---|---|
| 1 $dm^3$ | 1 l |
| 1 $m^3$ | 1 000 l |
| 1 $cm^3$ | 1 ml |
| 1 $ft^3$ | 28.317 l |

| Equivalencia capacidad ↔ volumen | |
|---|---|
| 1 litro | 0.264 galones |
| 1 galón | 3.7853 litros |

4APRENDERA®

4APRENDERA®

@aprendera.asesorias
44.44.14.51.77
aprendera.asesorias@gmail.com
www.aprendera.asesorias

Sierra Mojada 505. Lomas 3a Sección CP 7826. San Luis Potosí , SLP