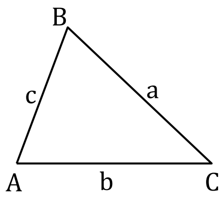
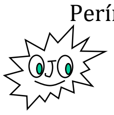
PERÍMETROS

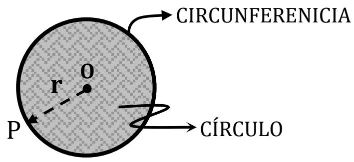


Perímetro del ΔABC: p(ΔABC)



$p(\Delta ABC) = a + b + c$

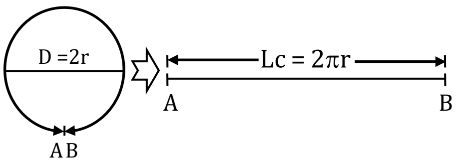
CIRCUNFERENCIA:



Por lo tanto:
- La circunferencia tiene longitud, más no área.
- El círculo tiene área y su perímetro es la longitud de su circunferencia.

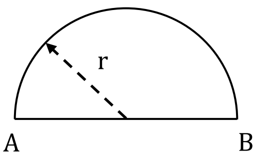
LONGITUD DE LA CIRCUNFERENCIA (Lc)

Pero D = 2r $\Rightarrow$ $\boxed{Lc = 2\pi r}$



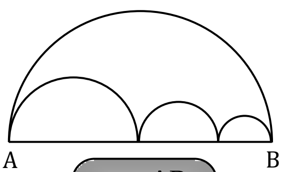
PROPIEDADES

1. LONGITUD DE EN FUNCIÓN AL DIÁMETRO DE UNA SEMICIRCUNFERENCIA

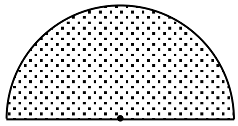


$\Rightarrow$ $L_{AB} = \dfrac{AB}{2}\pi$

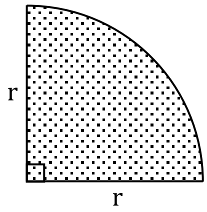
2. LONGITUD DE UNA LÍNEA CURVA FORMADA POR SEMICIRCUNFERENCIAS



$L_{\overset{\frown}{AB}} = \dfrac{AB}{2}\pi$

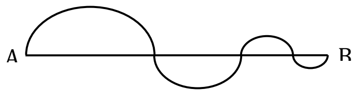


$P = \dfrac{\pi.D}{2}$



$P = \dfrac{\pi.R}{2}$

PERIMETRO DE LA CULEBRITA

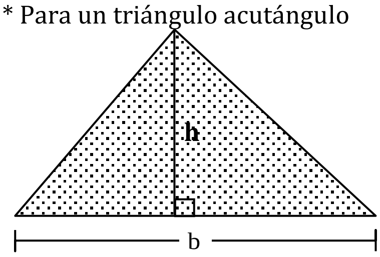


$L_{\overset{\frown}{AB}} = \dfrac{AB}{2}\pi$

Áreas de Regiones Geométricas

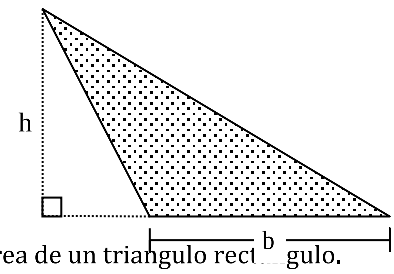
ÁREAS DE REGIONES TRIÁNGULARES

* Para un triángulo acutángulo



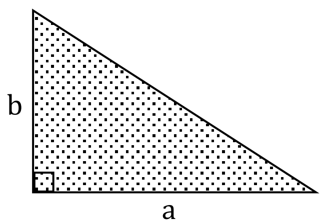
$A = \dfrac{b \cdot h}{2}$

* Para un triángulo obtusángulo



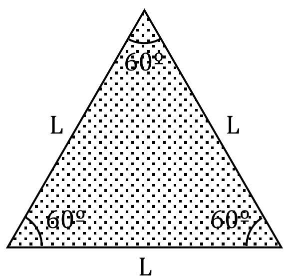
$A = \dfrac{b \cdot h}{2}$

Área de un triangulo rectángulo.



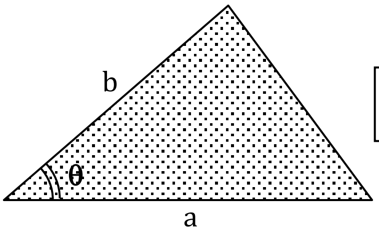
$A = \dfrac{a \cdot b}{2}$

Área de un triángulo equilátero conociendo su lado.



$A = \dfrac{L^2 \cdot \sqrt{3}}{4}$

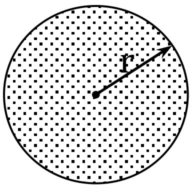
Área de un triangulo conociendo 2 lados y el ángulo comprendido.



$$A = \frac{a \cdot b}{2} \operatorname{Sen} \theta$$

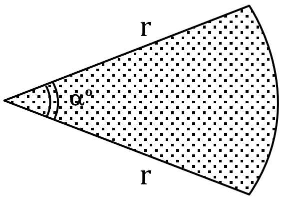
ÁREAS DE REGIONES CIRCULARES

Área de un círculo.



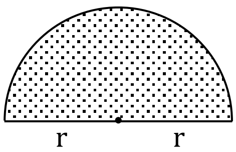
$$A = \pi \cdot r^2$$

Área de un sector circular.

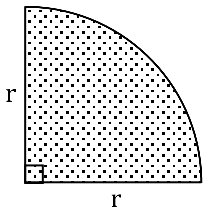


$$A = \frac{\pi \cdot r^2 \cdot \alpha}{360}$$

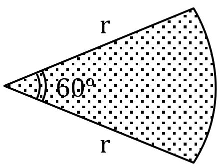
NOTA:



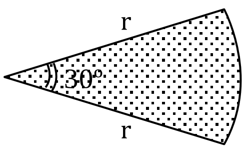
$$A = \frac{\pi r^2}{2}$$



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

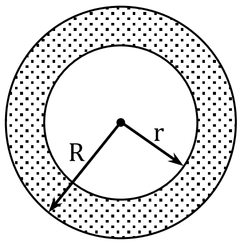


$$A = \frac{\pi r^2}{6}$$



$$A = \frac{\pi r^2}{12}$$

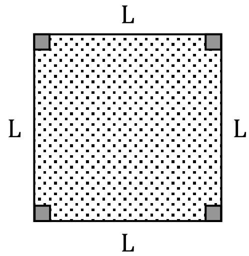
Área de una corona circular.



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

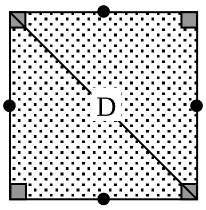
ÁREAS DE REGIONES CUADRANGULARES

Área de un cuadrado conociendo su lado.



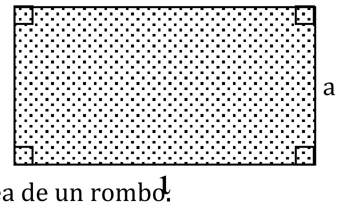
$$A = L^2$$

Área de un cuadrado conociendo su diagonal.



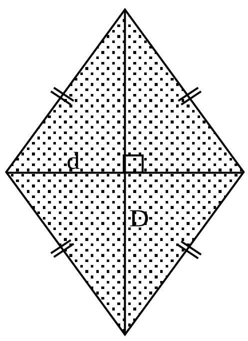
$$A = \frac{D^2}{2}$$

Área de un rectángulo.



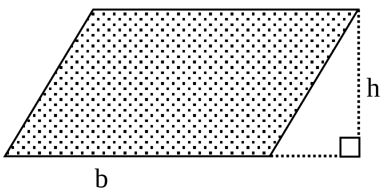
$$A = \ell \cdot a$$

Área de un rombo.



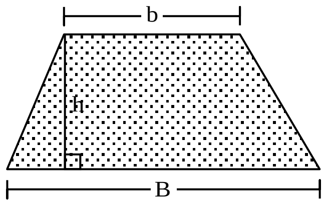
$$A = \frac{D \cdot d}{2}$$

Área de un paralelogramo.



$$A = b \cdot h$$

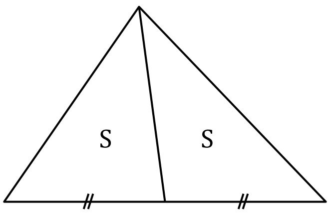
Área de un trapecio.



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

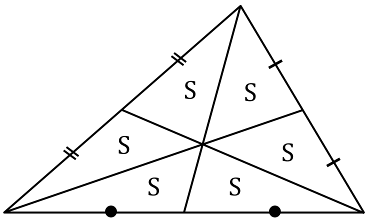
PROPIEDADES

1.-



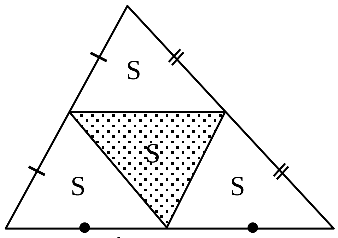
$$S=\frac{A_T}{2}$$

2.-



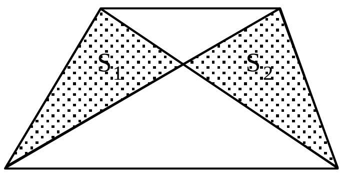
$$S=\frac{A_T}{6}$$

3.-



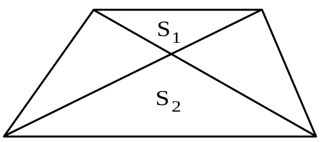
$$S=\frac{A_T}{4}$$

4.- En un trapecio.



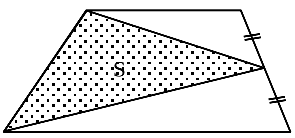
$$S_1=S_2$$

5.- En un trapecio.



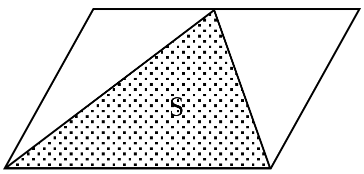
$$\sqrt{A_T}=\sqrt{S_1}+\sqrt{S_2}$$

6.- En un trapecio.



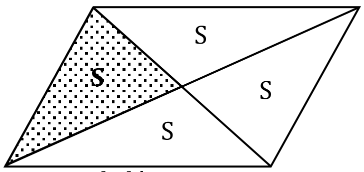
$$S=\frac{A_T}{2}$$

7.- En un paralelogramo.



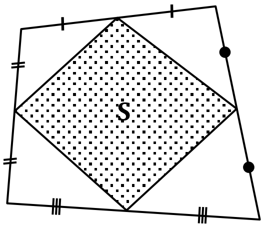
$$S=\frac{A_T}{2}$$

8.- En un paralelogramo.



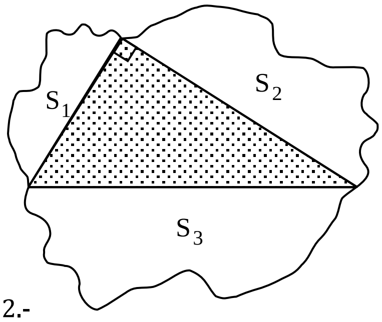
$$S=\frac{A_T}{4}$$

9.- En un cuadrilátero.



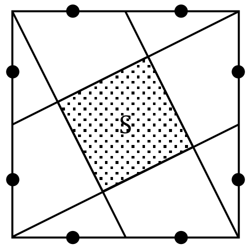
$$S=\frac{A_T}{2}$$

11.- Para áreas semejantes.



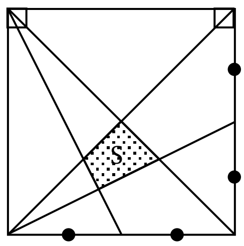
$$S_1+S_2=S_3$$

12.-



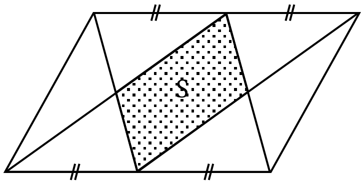
$$S=\frac{A_T}{5}$$

13.-



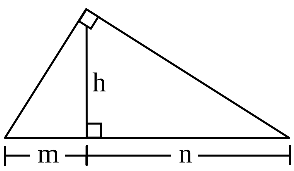
$$S=\frac{A_T}{20}$$

15.- En un paralelogramo.

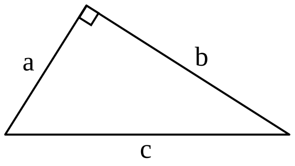


$$S=\frac{A_T}{4}$$

RELACIONES MÉTRICAS EN UN TRIÁNGULO RECTÁNGULO.

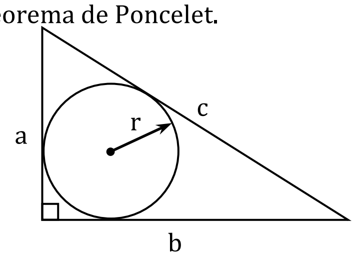


$$h^2=m\cdot n$$



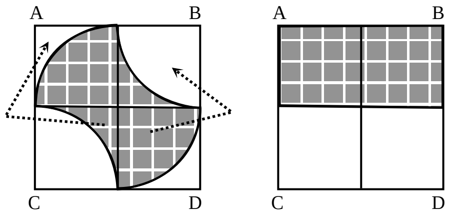
$a - b < c < a + b$

Teorema de Poncelet.



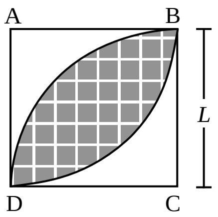
$a + b = c + 2r$

AREA DE LA ACHITA



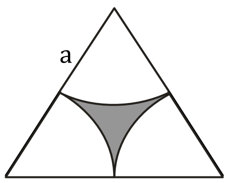
$$S_{\text{sombreada}} = \boxed{\frac{a^2}{2}}$$

AREA DE LA HOJA



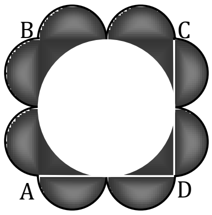
$$S_{\text{sombreada}} = \frac{L^2}{2}(\pi - 2)$$

AREA DE LA TANGUITA



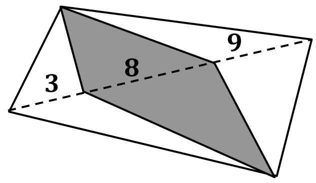
Área= $\frac{a^2}{2}(2\sqrt{3} - \pi)$

AREA DE LA FLORCITA



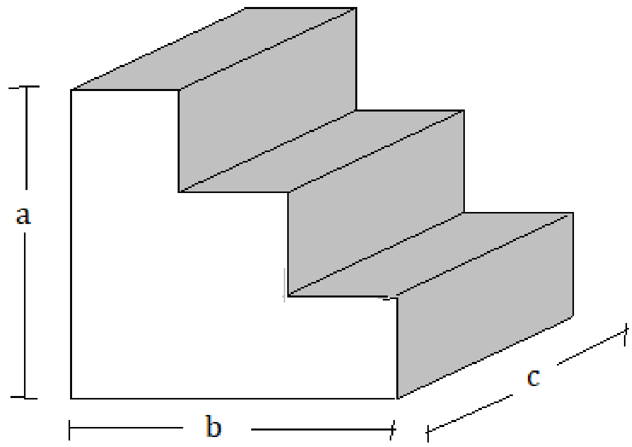
Área= L^2

AREAS PROPORCIONALES A LA CTE



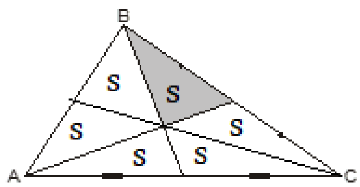
AT = 3K+8K+9K
AT = 20K

EN LA FIGURA. HALLAR EL AREA DE LA REGIÓN SOMBREADA.



AREA =(a+b). c

ÁREA SOMBREADA DEL TRIANGULO



$$AS = \frac{\text{AREA DEL TRIANGULO}}{6}$$