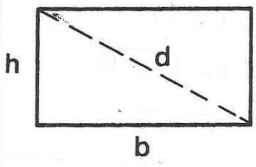
Formulario di geometria PIANA

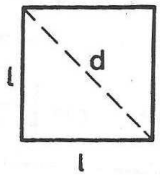
Rettangolo



$A = b \times h$ $\quad h = \frac{A}{b}$

$d = \sqrt{b^2 + h^2}$ $\quad h = \sqrt{d^2 - b^2}$

Quadrato

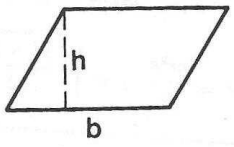


$A = l^2$ $\quad d = l\sqrt{2}$

$A = \frac{d^2}{2}$ $\quad l = \sqrt{A}$

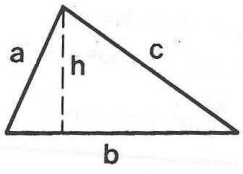
$\sqrt{2} = 1{,}414$

Parallelogramma



$A = b \times h$ $\quad b = \frac{A}{h}$

Triangolo

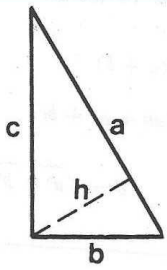


$A = \frac{b \times h}{2}$ $\quad h = \frac{A \times 2}{b}$

$A = \sqrt{\frac{p}{2}\left(\frac{p}{2} - a\right)\left(\frac{p}{2} - b\right)\left(\frac{p}{2} - c\right)}$

p = perimetro

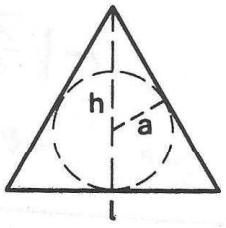
Triangolo rettangolo



$A = \frac{b \times c}{2}$ $\quad A = \frac{a \times h}{2}$

$b = \frac{b \times c}{a}$ $\quad a = \sqrt{b^2 + c^2}$

Triangolo equilatero



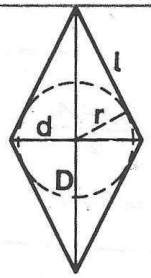
$A = \frac{l^2\sqrt{3}}{4}$ $\quad l = \frac{h \times 2}{\sqrt{3}}$ $\quad a = \frac{h}{3}$

$h = \frac{l\sqrt{3}}{2}$ $\quad h = l \times 0{,}866$

$l = \sqrt{\frac{A}{0{,}433}}$ $\quad a = l \times 0{,}288$

$a = r$

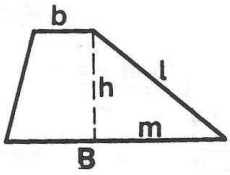
Rombo



$A = \frac{D \times d}{2}$ $\quad D = \frac{A \times 2}{d}$

$l = \sqrt{\left(\frac{D}{2}\right)^2 + \left(\frac{d}{2}\right)^2}$ $\quad r = \frac{\frac{D}{2} \times \frac{d}{2}}{l}$

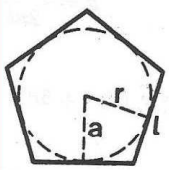
Trapezio



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

$B = \frac{A \times 2}{h} - b$ $\quad l = \sqrt{m^2 + h^2}$

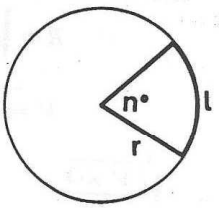
Poligono regolare



$A = \frac{p \times a}{2}$ $\quad a = \frac{A \times 2}{p}$

$A = l^2 \times N$ $\quad l = \sqrt{\frac{A}{N}}$ $\quad a = r$

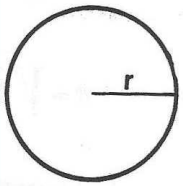
Arco e settore circolare



$l = \frac{\pi r n}{180}$ $\quad r = \frac{180 \times l}{\pi n}$ $\quad n = \frac{180 \times l}{\pi r}$

$a_s = \frac{\pi r^2 n}{360}$ $\quad a_s = \frac{l \times r}{2}$ $\quad r = \sqrt{\frac{a_s \times 360}{\pi n}}$

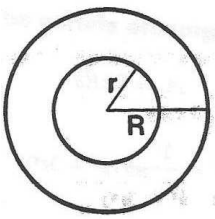
Cerchio



$A = \frac{c \times r}{2}$ $\quad A = \pi r^2$ $\quad c = 2\pi r$

$r = \sqrt{\frac{A}{\pi}}$ $\quad r = \frac{c}{2\pi}$

Corona circolare



$A = \pi(R^2 - r^2)$ $\quad R = \sqrt{\frac{A}{\pi} + r^2}$

$r = \sqrt{R^2 - \frac{A}{\pi}}$