

POTENZE

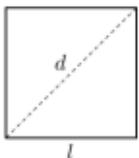

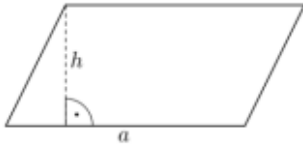
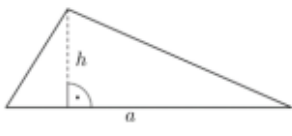
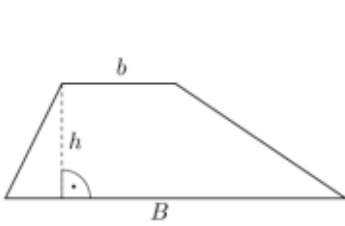

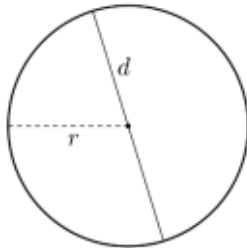
Per $a, b \in \mathbf{R}$, $m, n \in \mathbf{N}$:

$a^n = \underbrace{a \cdot a \cdot a \cdot \dots \cdot a}_{n \text{ fattori}} \quad (n \geq 2)$	$a^1 = a$	$a^0 = 1 \quad (a \neq 0)$
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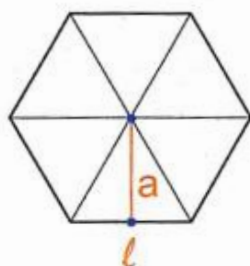
Proprietà (valide se ogni espressione è definita)

$a^m \cdot a^n = a^{m+n}$	$(a^m)^n = a^{m \cdot n}$	$a^n \cdot b^n = (a \cdot b)^n$
$a^m : a^n = \frac{a^m}{a^n} = a^{m-n}$	$a^n : b^n = \frac{a^n}{b^n} = \left(\frac{a}{b}\right)^n = (a:b)^n$	

GEOMETRIA PIANA

Quadrato	Rettangolo	Parallelogramma	Triangolo
			
$\mathcal{A} = l^2$ $d = l \cdot \sqrt{2}$	$\mathcal{A} = a \cdot b$	$\mathcal{A} = a \cdot h$	$\mathcal{A} = \frac{a \cdot h}{2}$
Trapezio	Rombo	Cerchio	
			
$\mathcal{A} = \frac{(B+b) \cdot h}{2}$	$\mathcal{A} = \frac{D \cdot d}{2}$	Lunghezza circonferenza: $C = 2 \cdot \pi \cdot r = d \cdot \pi$ Area cerchio: $\mathcal{A} = \pi \cdot r^2$	

poligono regolare (n lati)



$$A = [(l \cdot a) : 2] \cdot n$$

$$P = n \cdot l$$

TEOREMA DI PITAGORA

In ogni triangolo rettangolo, la somma delle aree dei quadrati costruiti sui cateti (lati adiacenti all'angolo retto) è uguale all'area del quadrato costruito sull'ipotenusa (lato opposto all'angolo retto).

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

GEOMETRIA SOLIDA

Prisma	Cilindro	Piramide
$\mathcal{A}_t = 2\mathcal{A}_b + \mathcal{A}_r$ $\mathcal{V} = \mathcal{A}_b \cdot h$	$\mathcal{A}_t = 2\mathcal{A}_b + \mathcal{A}_r$ $\mathcal{A}_r = 2 \cdot \pi \cdot r \cdot h$ $\mathcal{V} = \mathcal{A}_b \cdot h = \pi \cdot r^2 \cdot h$	$\mathcal{A}_t = \mathcal{A}_b + \mathcal{A}_r$ $\mathcal{V} = \frac{1}{3} \cdot \mathcal{A}_b \cdot h$

Cubo	Parallelepipedo rettangolo
$\mathcal{V} = s^3$ $\mathcal{A}_t = 6 \cdot s^2$	$\mathcal{V} = a \cdot b \cdot c$ $\mathcal{A}_t = 2 \cdot a \cdot b + 2 \cdot a \cdot c + 2 \cdot b \cdot c$