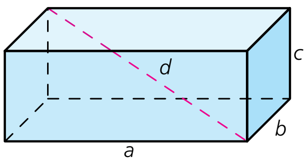
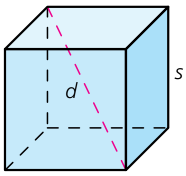
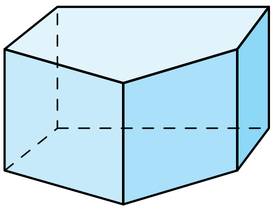
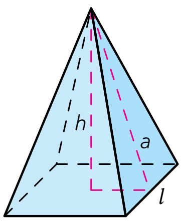
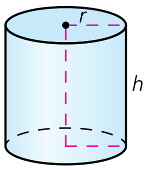
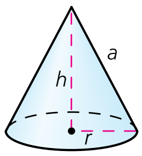
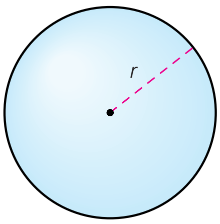
FORMULARIO DI GEOMETRIA SOLIDA

Solido	Formule dirette	Formule inverse
Parallelepipedo rettangolo 	$A_l = p_b h$ oppure $A_l = 2(ab + bc)$ $A_t = A_l + 2A_b$ oppure $A_t = 2(ab + ac + bc)$ $V = abc$ oppure $V = A_b h$ $d = \sqrt{a^2 + b^2 + c^2}$	$p_b = \frac{A_l}{h}$ $h = \frac{A_l}{p_b}$ $A_l = A_t - 2A_b$ $A_b = \frac{A_t - A_l}{2}$ $A_b = \frac{V}{h}$ $h = \frac{V}{A_b}$
Cubo 	Come il parallelepipedo, oppure: $A_l = 4s^2$ $A_t = 6s^2$ $V = s^3$ $d = s\sqrt{3} \approx s \cdot 1{,}73$	$s = \sqrt{\frac{A_l}{4}}$ $s = \sqrt{\frac{A_t}{6}}$ $s = \sqrt[3]{V}$
Prisma retto 	$A_l = p_b h$ $A_t = A_l + 2A_b$ $V = A_b h$	$p_b = \frac{A_l}{h}$ $h = \frac{A_l}{p_b}$ $A_l = A_t - 2A_b$ $A_b = \frac{A_t - A_l}{2}$ $A_b = \frac{V}{h}$ $h = \frac{V}{A_b}$
Piramide retta 	$A_l = \frac{p_b a}{2}$ $A_t = A_l + A_b$ $V = \frac{A_b h}{3}$	$p_b = \frac{2A_l}{a}$ $a = \frac{2A_l}{p_b}$ $A_b = \frac{3V}{h}$ $h = \frac{3V}{A_b}$

Solido	Formule dirette	Formule inverse
Cilindro 	$A_l = 2\pi rh$ $A_t = A_l + 2A_b$ $V = \pi r^2 h$	$r = \frac{A}{2\pi h}$ $h = \frac{A}{2\pi r}$ $A_l = A_t - 2A_b$ $A_b = \frac{A_t - A_l}{2}$ $h = \frac{V}{\pi r^2}$ $r = \sqrt{\frac{V}{\pi h}}$
Cono  C: misura della circonferenza di base	$A_l = \frac{C \cdot a}{2} = \pi ra$ $A_l = \pi ra$ $A_t = A_l + A_b = \pi ra + \pi r^2$ $V = \frac{\pi r^2 h}{3}$	$a = \frac{A_l}{\pi r}$ $r = \frac{A_l}{\pi a}$ $r = \sqrt{\frac{3V}{\pi h}}$ $h = \frac{3V}{\pi r^2}$
Sfera 	$A = 4\pi r^2$ $V = \frac{4}{3}\pi r^3$	$r = \sqrt{\frac{A}{4\pi}}$ $r = \sqrt[3]{\frac{3V}{4\pi}}$

Poliedri regolari	Area totale	Volume
Tetraedro	$4 \cdot l^2 \cdot 0{,}433$	$l^3 \cdot 0{,}117$
Esaedro o Cubo	$6 \cdot l^2$	$l^3 \cdot 1$
Ottaedro	$8 \cdot l^2 \cdot 0{,}433$	$l^3 \cdot 0{,}471$
Dodecaedro	$12 \cdot l^2 \cdot 1{,}720$	$l^3 \cdot 7{,}663$
Icosaedro	$20 \cdot l^2 \cdot 0{,}433$	$l^3 \cdot 2{,}182$