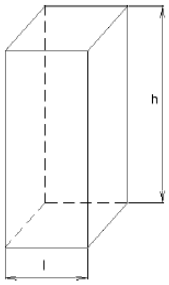
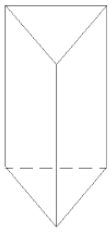
VOLUME DOS SÓLIDOS GEOMÉTRICOS

PRISMA QUADRANGULAR



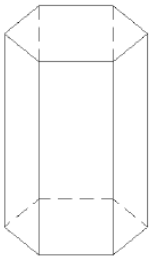
$P=4l$
$A_b=l^2$
$a=\frac{l}{2}$
$d=l\sqrt{2}$
$A_{FL}=l.H$
$Al=4.l.H$
$At=Al+2A_b$
$V=A_b.H$

PRISMA TRIANGULAR



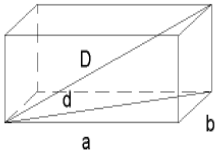
$P=3l$
$A_b=\frac{l^2\sqrt{3}}{4}$
$a=\frac{l\sqrt{3}}{6}$
$h=\frac{l\sqrt{3}}{2}$ (altura da base)
$A_{FL}=l.H$
$Al=3.l.H$
$At=Al+2A_b$
$V=A_b.H$

PRISMA HEXAGONAL



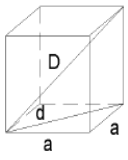
$P=6l$
$A_b=\frac{6l^2\sqrt{3}}{4}$
$a=\frac{l\sqrt{3}}{2}$
$A_{FL}=l.H$
$Al=6.l.H$
$At=Al+2A_b$
$V=A_b.H$

PARALELEPÍPEDO



$Al=2ac+2bc$
$At=Al+2ab$ ou
$At=2ab+2ac+2bc$
$V=AxBxC$
$D=a^2+b^2+c^2$

CUBO



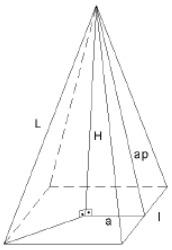
$S=12a$ (soma das arestas)

$A_{face}=a^2$ $\quad Al=4a^2$

$At=6a^2$ $\quad V=a^3$

$d=a\sqrt{2}$ $\quad D=a\sqrt{3}$

PIRÂMIDE QUADRANGULAR



$H^2+a^2=ap^2$

$H^2+R^2=L^2$

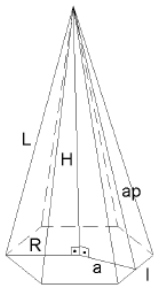
$A_{FL}=\frac{l.ap}{2}$

$Al=\frac{4.l.ap}{2}$

$At=Al+A_b$

$V=\frac{A_b.H}{3}$

PIRÂMIDE HEXAGONAL



$H^2+a^2=ap^2$

$H^2+R^2=L^2$

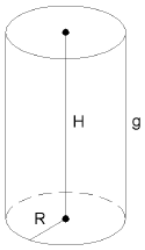
$A_{FL}=\frac{l.ap}{2}$

$Al=\frac{6.l.ap}{2}$

$At=Al+A_b$

$V=\frac{A_b.H}{3}$

CILINDRO



g=h

∅=2R

$P=2\pi R$

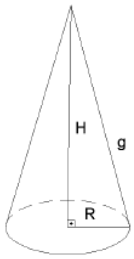
$A_b=\pi R^2$

$Al=2\pi Rg$ ou $Al=2\pi RH$

$At=Al+2A_b$

$V=A_b xH$ ou $V=A_b xg$

CONE



$H^2+R^2=g^2$

∅=2R

$P=2\pi R$

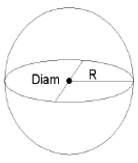
$A_b=\pi R^2$

$Al=\pi Rg$

$At=Al+A_b$

$V=\frac{A_b.H}{3}$

ESFERA



∅=2R

$A=4\pi R^2$

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

Acm = área da círculo máximo $Acm=\pi R^2$