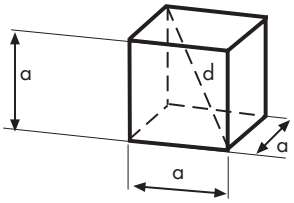
ANEXO N°3 Propiedades de cuerpos y volúmenes

1. CUBO

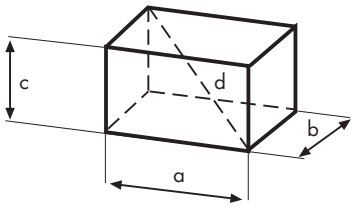


$V = a^3$

$A = 6a^2$

$d = a\sqrt{3}$

2. PRISMA RECTANGULAR (RECTO)

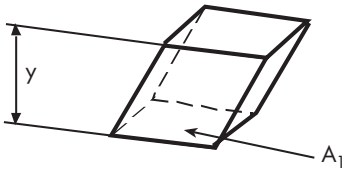


$V = abc$

$A = 2(ab + ac + bc)$

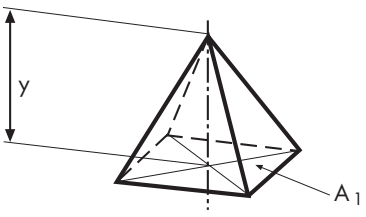
$d = \sqrt{a^2 + b^2 + c^2}$

3. PRISMA OBLICUO



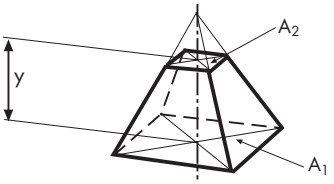
$V = A_1 y$

4. PIRÁMIDE RECTANGULAR (RECTA)



$V = A_1 y/3$

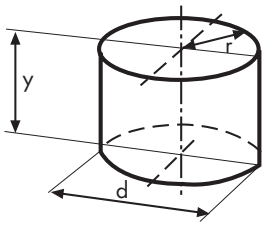
5. PIRÁMIDE TRUNCADA



$V = y\ (A_1 + A_2 + \sqrt{A_1\ A_2})/3$

$\approx y\ (A_1 + A_2)/2$

6. CILINDRO CIRCULAR (RECTO)

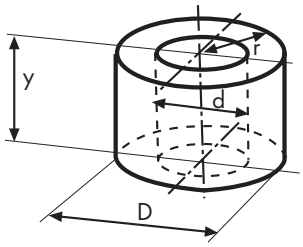


$V = (\pi/4)d^2y$

Área manto $A_m = 2\pi ry$

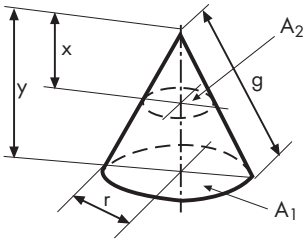
Área total $A_t = 2\pi r (r + y)$

7. CILINDRO HUECO



$V = (\pi/4)\ y(D^2 - d^2)$

8. CONO CIRCULAR (RECTO)



$V = (\pi/3)r^2y$

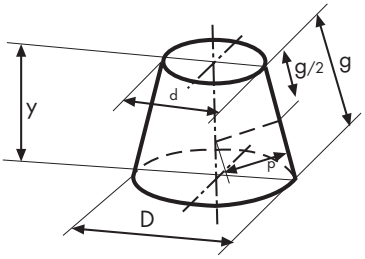
Área manto $A_m = \pi rg$

Área total $A_t = \pi r (r + g)$

$g = \sqrt{y^2 + r^2}$

$A_2 : A_t = x^2 : y^2$

9. CONO TRUNCADO

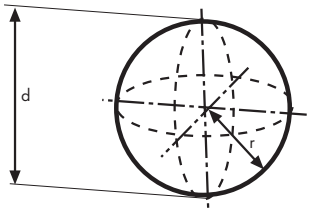


$V = (\pi/12)y\ (D^2 + Dd + d^2)$

A manto $A_m = (\pi/2)g\ (D + d) = 2\pi py$

$g = \sqrt{[(D - d)/2]^2 + h^2}$

10. ESFERA



$V = 4/3\ \pi r^3 = 1/6\ \pi d^3$
$\approx 4{,}189\ r^3$

$A \approx 4\pi r^2 = \pi d^2$