TRIÂNGULO
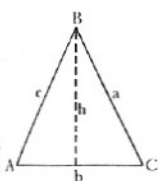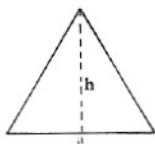
$$S = \sqrt{p\,(p-a)\,(p-b)\,(p-c)}$$

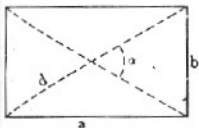$$= \frac{bh}{2} = \frac{bc}{2}\,\text{sen } A$$

$$p = \frac{a+b+c}{2}$$

TRIÂNGULO EQUILÁTERO

$$h = \frac{a\sqrt{3}}{2}$$

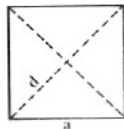$$S = \frac{a^2\sqrt{3}}{4}$$

RECTÂNGULO

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

$$S = ab$$

$$= \frac{d^2}{2}\,\text{sen }\alpha$$

QUADRADO

$$d = a\sqrt{2}$$
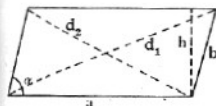
$$S = a^2$$

$$= \frac{d^2}{2}$$

PARALELOGRAMO
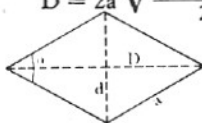
$$d_1 = \sqrt{(a + h\,\cot\alpha)^2 + h^2}$$

$$S = ah$$

$$= ab\,\text{sen }\alpha$$

$$d_2 = \sqrt{(a - h\,\cot\alpha)^2 + h^2}$$
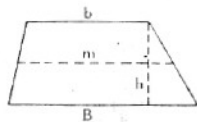
LOSANGO

$$d = 2a\sqrt{\frac{1-\cos\alpha}{2}}$$

$$D = 2a\sqrt{\frac{1+\cos\alpha}{2}}$$

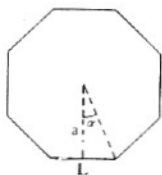$$S = \frac{dD}{2}$$

$$= a^2\,\text{sen }\alpha$$

TRAPÉZIO

$$m = \frac{a + b}{2}$$

$$S = mh$$

$$= \frac{b + B}{2} h$$

POLÍGONO REGULAR (*n* lados)
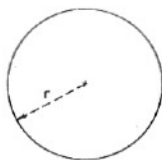
$$\alpha = \frac{180}{n}$$

$$S = \frac{nL}{2} a$$

$$= \frac{nL^2}{4} \cot \alpha$$

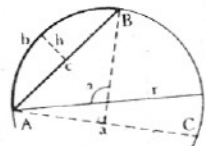## HEXÁGONO REGULAR

$$S = \frac{3\sqrt{3}}{2} L^2$$

CÍRCULO

$$p = 2\pi r$$

$$d = 2r$$

$$S = \pi r^2$$

$$= \frac{\pi d^2}{4}$$

SEGMENTO CIRCULAR

$$S = r^2 \left(\frac{\pi\alpha}{360} - \frac{\operatorname{sen}\alpha}{2} \right)$$

$$= \frac{br - c(r - h)}{2}$$

$$= \frac{r}{2} \left(b - \frac{a}{2} \right)$$
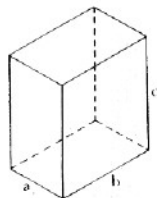
arc AB = b
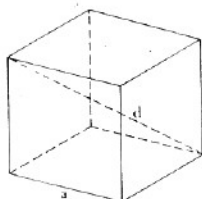
$$AB = c = 2\sqrt{2hr - h^2} \qquad AC = a$$

SECTOR CIRCULAR

$$S = \frac{\pi r^2 \alpha}{360}$$

$$= \frac{r}{2} \operatorname{arc}\alpha$$

PARALELEPÍPEDO RECTÂNGULO

$S_l = 2c\,(a + b)$

$S_t = 2\,(ab + ac + bc)$

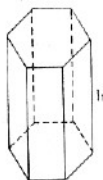## CUBO

$S_l = 4a^2$

$= \dfrac{4d^2}{3}$

$S_t = 6a^2$
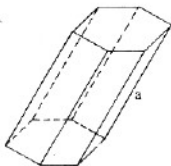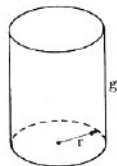
$= 2d^2$

PRISMA RECTO

$S_l = ph$

$S_t = ph + 2S_b$

S_b — área da base
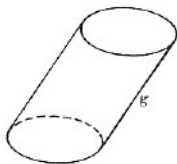p — perímetro da base

PRISMA OBLÍQUO

$S_l = ap$

$S_t = ap + 2S_b$

p — perímetro da secção recta
S_b — área da base

CILINDRO DE REVOLUÇÃO

$S_l = 2\pi rg$

$S_t = 2\pi r\,(g + r)$

CILINDRO OBLÍQUO

$S_l = pg$

$S_t = pg + 2S_b$

p — perímetro de uma secção recta
S_b — área de uma base