

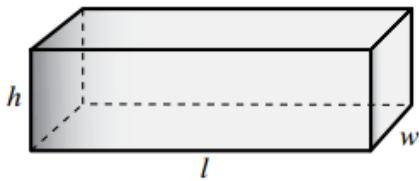
Geometría

Superficie lateral

Resolver la incógnita que se encuentra en la ecuación de la superficie lateral de cada uno de los siguientes cuerpos.

Expresar todos los resultados en 3 medidas del sistema inglés y 3 medidas del sistema decimal.

Prisma base rectangular

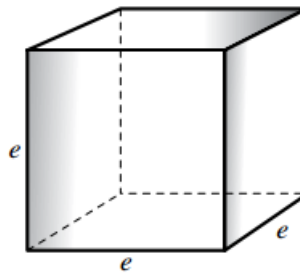


$$S = 2lw + 2wh + 2hl$$

$$\begin{cases} l = 6in \\ w = 0.333ft \\ h = ? \\ S = 368in^2 \end{cases}$$

$$R = 1ft\ 4in = 40.6cm$$

Cubo

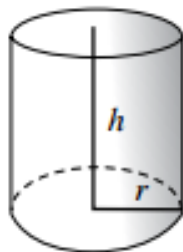


$$S = 6e^2$$

$$\begin{cases} e = 45ft \\ S = ? \end{cases}$$

$$R = 1350yd = 4050ft = 1.234 \times 10^5 cm$$

Cilindro

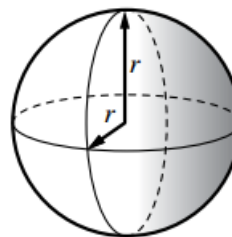


$$S = 2\pi r^2 + 2\pi rh = 2\pi r(r + h)$$

$$\begin{cases} r = 10.16cm \\ h = ? \\ S = 1306.2in^2 \end{cases}$$

$$R = 4ft = 121.9cm$$

Esfera



$$S = 4\pi r^2$$

$$\begin{cases} S = 1296cm^2 \\ r = ? \end{cases}$$

$$R = 4in = 0.333ft = 10.16cm$$

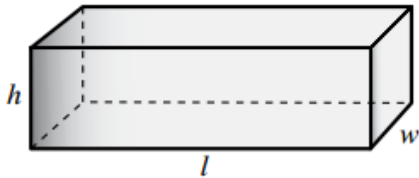
Volúmen

Hallar la incógnita que se encuentra en la ecuación del volumen de cada uno de los siguientes cuerpos.

Expresar todos los resultados en in^3 , ft^3 , yd^3 , cm^3 , L , m^3

$$V = Bh$$

Prisma base rectangular

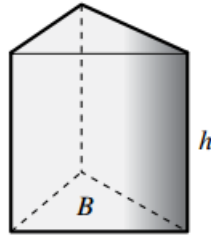


$$V = Bh = lwh$$

$$\begin{cases} l = 6in \\ w = 4in \\ h = 1ft\ 4in \\ V = ? \end{cases}$$

$$R: 23.4cm^3 = 384in^3 = 0.0234L$$

Prisma base triangular

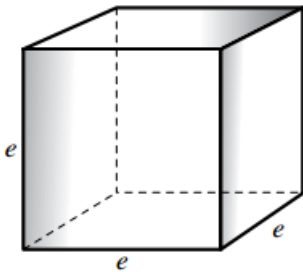


$$V = Bh$$

$$\begin{cases} h = 15yd \\ B = 120ft^2 \\ V = ? \end{cases}$$

$$R = 5400ft^3 = 200yd^3 = 1.529 \times 10^6 L$$

Cubo

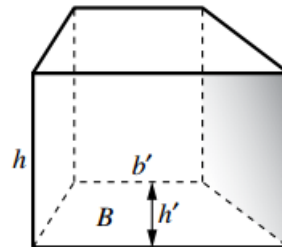


$$V = Bh = e^3$$

$$\begin{cases} e = 4yd \\ V = ? \\ R = 64yd^3 = 1728ft^3 \end{cases}$$

$$\begin{cases} e = 4in \\ V = ? \\ R = \frac{1}{27}ft^3 \end{cases}$$

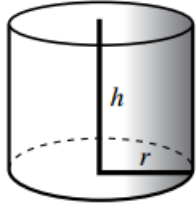
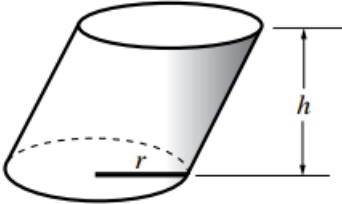
Prisma base trapecial



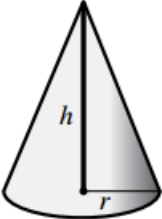
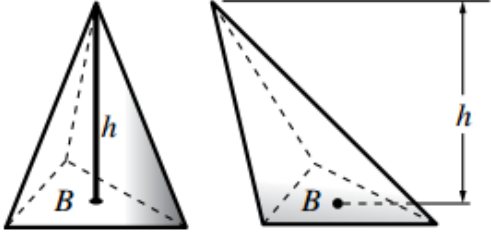
$$V = Bh = \left(\frac{B + b'}{2} \right) h' h$$

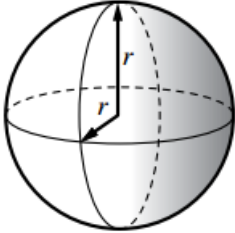
$$\begin{cases} B = 55cm \\ b' = 30cm \\ h' = 10cm \\ h = 35cm \\ V = ? \end{cases}$$

$$R = 6432in^3 = 392.5cm^3 = 0.3925L$$

Cilindro	
	
$V = Bh = \pi r^2 h$ $h = 4 \text{ yd}$ $\begin{cases} r = 2 \text{ ft} \\ V = ? \end{cases}$ $R = 8.72 \times 10^{-2} \text{ in}^3 = 150.72 \text{ ft}^3$	

$$V = \frac{1}{3} Bh$$

Cono	Pirámide base triangular
	
$V = \frac{1}{3} Bh = \frac{\pi r^2 h}{3}$ $\begin{cases} h = 2 \text{ ft} \\ r = 2 \text{ yd} \\ V = ? \end{cases}$ $R = 4.36 \times 10^{-2} \text{ in}^3 = 75.36 \text{ ft}^3$	$V = \frac{1}{3} Bh$ $\begin{cases} h = 8 \text{ cm} \\ B : \text{base} = 9 \text{ cm}, \text{altura} = 4.5 \text{ cm} \\ V = ? \end{cases}$ $R = 3.3 \text{ in}^3 = 54 \text{ cm}^3 = 0.054 \text{ L}$

Esfera

$V = \frac{4}{3} \pi r^3$ $\begin{cases} r = 10 \text{ in} \\ V = ? \end{cases}$ $R = 2.42 \text{ ft}^3 = 4186 \text{ in}^3$