
Prisms:

A solid figure having at least one pair of parallel surfaces that create a uniform cross-section.

Bases

The faces that create the uniform cross-section.

Altitude or Height

The distance between the bases

Lateral Faces

All faces NOT including the bases.

Volume

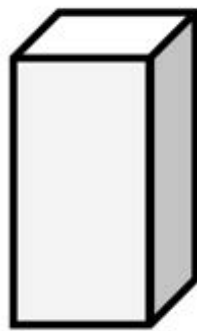
The total amount of space in a solid. Measured in cubic units.

Lateral Surface Area

The area of all surfaces excluding the two bases. Measured in square units.

Total Surface Area

The sum of the lateral surface area and the two bases. Measured in square units.



$$L = Ph$$

$$S = L + 2A$$

$$V = Ah$$

Pyramid:

A solid object with one base and three or more lateral faces that taper to a single point opposite the base.

Apex

The single point that all sides taper to.

Altitude

The perpendicular distance from the apex to the base.

Slant height

The height of one of the lateral faces.

$$L = \frac{1}{2} Ps$$

$$S = L + A$$

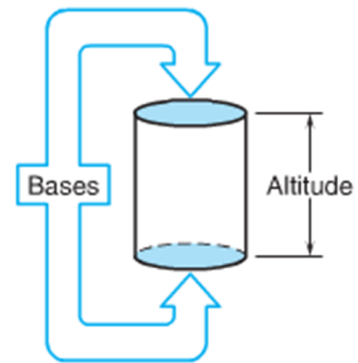
$$V = \frac{1}{3} Ah$$

Cylinder:

A solid object with two identical circular bases.

$$L = \pi dh \quad \text{OR} \quad L = 2\pi rh$$

$$V = \pi r^2 h$$



Sphere:

The surface whose points are all equidistant from a given point called the center.

$$S = 4\pi r^2 \quad \text{OR} \quad S = \pi d^2$$

$$V = \frac{4}{3}\pi r^3 \quad \text{OR} \quad V = \frac{1}{6}\pi d^3$$



Cone:

A pyramid-like solid figure with a circular base.

$$L = \frac{1}{2}\pi ds \quad \text{OR} \quad L = \pi rs$$

$$V = \frac{1}{3}\pi r^2 h$$

