

Formulas from Geometry

The most frequently used notation is as follows.

r = radius

h = altitude

b (or a) = length of base

A = area

C = circumference

V = volume

S = curved surface area

B = area of base

Then,

Triangle: $A = \frac{1}{2}bh$

Circle: $A = \pi r^2$, $C = 2\pi r$

Parallelogram: $A = bh$

Trapezoid: $A = \frac{1}{2}(a + b)h$

Right Circular Cylinder: $V = \pi r^2 h$, $S = 2\pi r h$

Right Circular Cone: $V = \frac{1}{3}\pi r^2 h$, $S = \pi r \sqrt{r^2 + h^2}$

Sphere: $V = \frac{4}{3}\pi r^3$, $S = 4\pi r^2$

Prism/Cylinder with Parallel Base: $V = Bh$

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