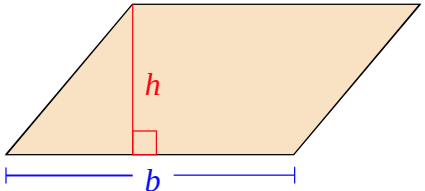


Formulas from Geometry

To find the perimeter of any plane figure, find the sum of the lengths of each side of the figure.

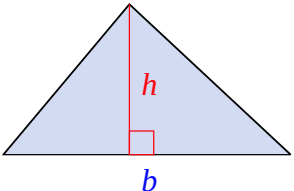
For the formulas below, let **A** = area, **C** = circumference, **V** = volume, and **B** = the area of the base of a space figure. Let $\pi = 3.14159$

Parallelogram



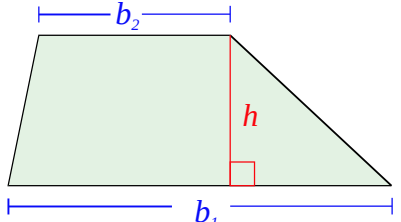
$A = \text{base} \times \text{height}$
 $A = bh$

Triangle



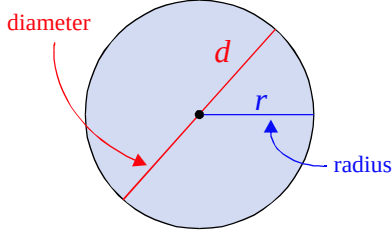
$A = \frac{1}{2} \text{ base} \times \text{height}$
 $A = \frac{1}{2} bh$

Trapezoid



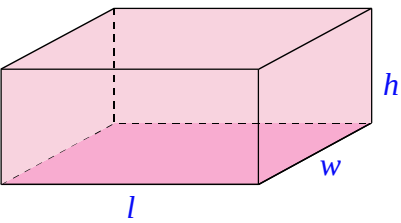
$A = \frac{1}{2} \times \text{sum of bases} \times \text{height}$
 $A = \frac{1}{2} (b_1 + b_2)h$

Circle



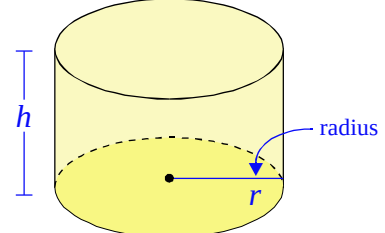
$C = 2\pi r$ or $C = \pi d$
 $A = \pi r^2$

Rectangular Prism



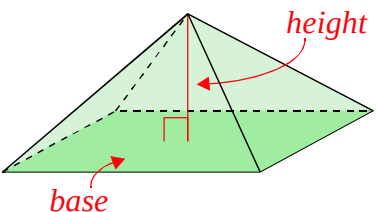
$V = \text{area of base} \times \text{height}$
 $A = Bh = lwh$

Cylinder



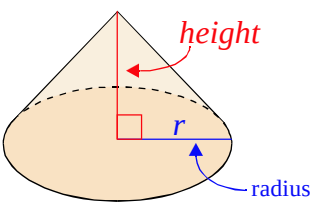
Area of base $B = \pi r^2$
 $V = \text{area of base} \times \text{height}$
 $V = Bh = \pi r^2 h$

Pyramid



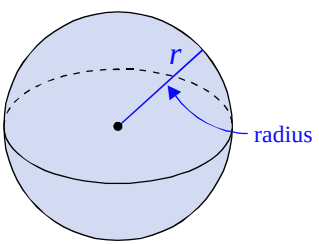
$V = \frac{1}{3} \times \text{area of base} \times \text{height}$
 $V = \frac{1}{3} Bh$

Cone



Area of base $B = \pi r^2$
 $V = \frac{1}{3} \times \text{area of base} \times \text{height}$
 $V = \frac{1}{3} Bh = \frac{1}{3} \pi r^2 h$

Sphere



$V = \frac{4}{3} \pi r^3$