Made in USA

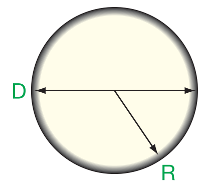
## Area and Volume Formulas

### Circle

$D = 2R$

$C = 2\pi R = \pi D$

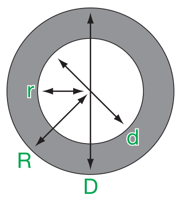
$A = \pi R^2 = \frac{\pi D^2}{4}$




### Circular Ring

$A = \pi (R^2 - r^2)$

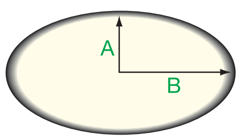
$= 0.7854 (D^2 - d^2)$




### Ellipse

$A = \pi \times A \times B$

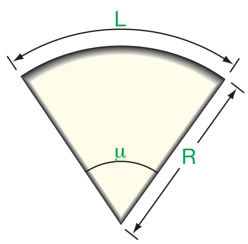
$C = \pi \sqrt{2(A^2 + B^2)}$




### Sector

$A = \frac{\pi R^2 \propto}{360} = \frac{RL}{2}$

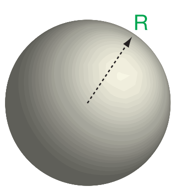
$L = \frac{\pi R \propto}{180} = \frac{2A}{R}$




### Sphere

$A = 4\pi R^2$

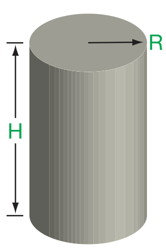
$V = \frac{4\pi R^3}{3}$




### Cylinder

$A = 2\pi R (R + H)$

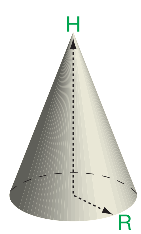
$V = \pi R^2 H$




### Cone

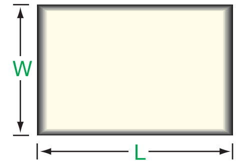
$A = \pi R \sqrt{(R^2 + H^2)}$

$V = \frac{\pi R^2 H}{3}$



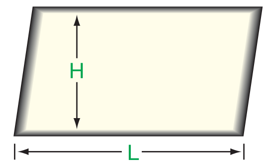

### Rectangle

$A = L \times W$



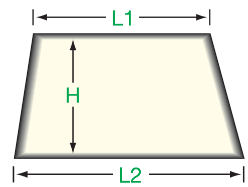

### Parallelogram

$A = L \times H$




### Trapezoid

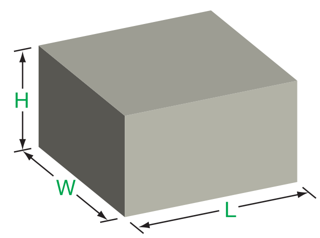
$A = \frac{(L1 + L2)\,H}{2}$




### Rectangular Solid

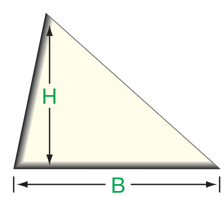
$A = 2\,(WL + LH + HW)$

$V = W \times L \times H$




### Triangle

$A = \frac{B \times H}{2}$

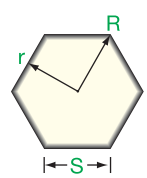



### Hexagon

$S = R = 1.155r$

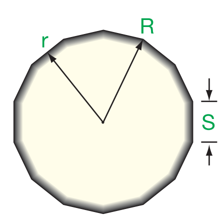
$A = 2.598\ S^2$

$= 3.464\ r^2$




### Regular Polygon

$A = \frac{NSr}{2} = \frac{NS}{2} \sqrt{R2 - \frac{S^2}{4}}$




**A** = Area
**C** = Circumference
**D** = Diameter
**N** = Number of sides
**V** = Volume
**R** = Radius
**S** = Length of side
**∝** = Angle
**π** = 3.1416