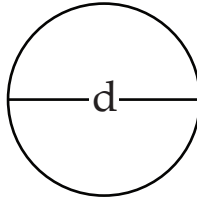


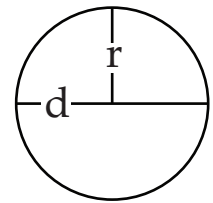
Circle

$A = \pi (r^2)$
 $A = d^2 (.7854)$
 $C = \pi d$



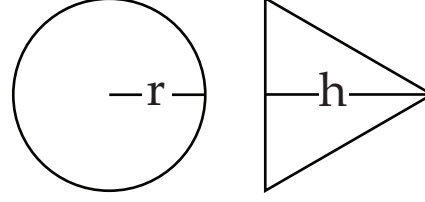
Sphere

Area of a Surface = $4 \pi r^2$
 $V = \frac{4 \pi r^3}{3}$ or $\frac{\pi d^3}{6}$



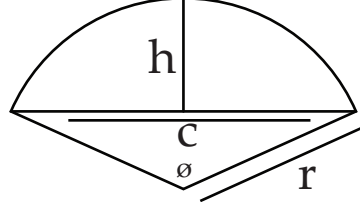
Cone

$A = \pi r \sqrt{r^2 + h^2}$
 $V = \frac{\pi r^2 h}{3}$



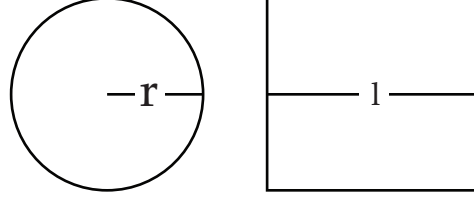
Circular Segment

$A = .5 [r l - c (r - h)]$
 where $l = .01745 r \phi$



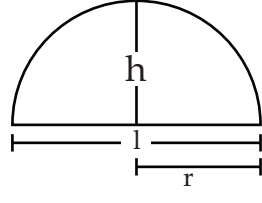
Cylinder

$A = 2 \pi r l$
 $V = \pi r^2 l$



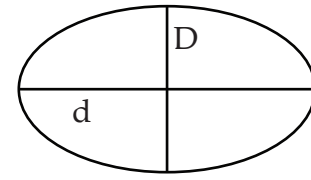
Spherical Segment

Area of spherical surface = $2 \pi r h$
 $V = \pi h^2 (r - \frac{h}{3})$



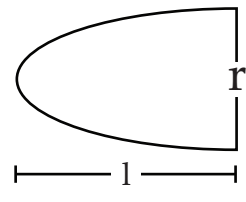
Ellipse

$A = \pi d D$



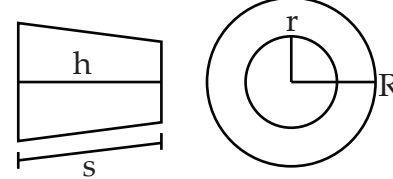
Paraboloid

$V = \frac{\pi r^2 l}{2}$



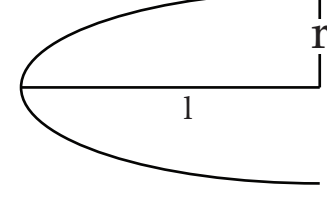
Frustrum of a Cone

$A = \pi s (R + r)$
 $V = \frac{\pi h}{3} (R^2 + Rr + r^2)$



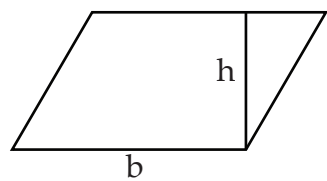
Paraboloid

$A = \frac{2 l r}{3}$



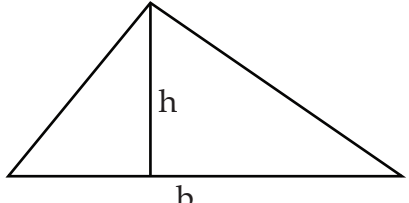
Parallelogram

$A = b h$



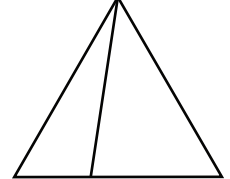
Triangles

$A = \frac{b h}{2}$



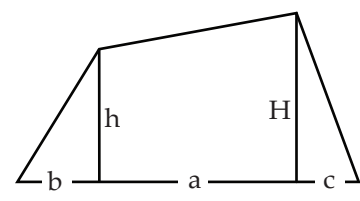
Pyramid

$V = \frac{N s r h}{6}$
 A = the sum of the areas of the sides



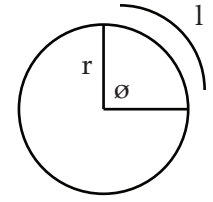
Trapezium

$A = \frac{(H + h) a + b h + c H}{2}$



Circular Section

$A = \frac{r l}{2}$
 $l = \frac{\pi r \phi}{180}$



Trapezoid

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

