

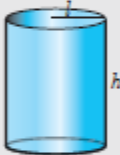

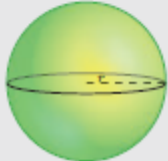
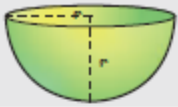
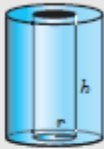

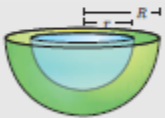
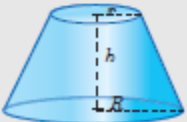


Mensuration Points to Remember:

Points to Remember				
Solid	Figure	Curved surface Area / Lateral surface Area (in sq. units)	Total surface Area (in sq. units)	Volume (in cubic units)
Cuboid		$2h(l + b)$	$2(lb + bh + lh)$	$l \times b \times h$
Cube		$4a^2$	$6a^2$	a^3
Right Circular Cylinder		$2\pi rh$	$2\pi r(h + r)$	$\pi r^2 h$
Right Circular Cone		πrl $l = \sqrt{r^2 + h^2}$ $l = \text{slant height}$	$\pi rl + \pi r^2$ $= \pi r(l + r)$	$\frac{1}{3} \pi r^2 h$
Sphere		$4\pi r^2$	$4\pi r^2$	$\frac{4}{3} \pi r^3$
Hemisphere		$2\pi r^2$	$3\pi r^2$	$\frac{2}{3} \pi r^3$
Hollow cylinder		$2\pi(R + r)h$	$2\pi(R + r)(R - r + h)$	$\pi(R^2 - r^2)h$
Hollow sphere		$4\pi R^2 = \text{outer surface area}$	$4\pi(R^2 + r^2)$	$\frac{4}{3} \pi(R^3 - r^3)$
Hollow hemisphere		$2\pi(R^2 + r^2)$	$\pi(3R^2 + r^2)$	$\frac{2}{3} \pi(R^3 - r^3)$
Frustum of right circular cone.		$\pi(R + r)l$ where $l = \sqrt{h^2 + (R - r)^2}$	$\pi(R + r)l + \pi R^2 + \pi r^2$	$\frac{1}{3} \pi h [R^2 + r^2 + Rr]$