

Formulas:

Cube - $V = s^3$, $SA = 6s^2$

Cylinder - $V = \pi r^2 h$, $SA = 2\pi r^2 + 2\pi r h$

Sphere - $V = \frac{4}{3}\pi r^3$, $SA = 4\pi r^2$

Rectangular Solid - $V = lwh$, $SA = 2lw + 2wh + 2lh$,

Cone - $V = \frac{1}{3}\pi r^2 h$, $SA = \pi r^2 + \pi r s$, $s = \sqrt{h^2 + r^2}$

Pyramid - $V = \frac{1}{3}lwh$, $SA = lw + 2bs$, $SA = lw + ls + ws$, $s = \sqrt{h^2 + (b/2)^2}$

3D Shape	L – length or side	W - width	H - height	R - radius	S – slant height	V - volume	SA – surface area
Cube	6cm					$216cm^3$	$216cm^2$
Cube	5m					$125m^3$	$150m^2$
Rectangular Solid	50mm	30mm	10mm			$15000mm^3$	$4600m^2$
Rectangular Solid	5 ft	4ft	3ft			$60m^3$	$94m^2$
Cylinder			20cm	10cm		$6283.18cm^3$	$1884.95cm^2$
Cylinder			8ft	4ft		$402.12ft^3$	$310.59ft^2$
Cone			40in	8in	40.79in	$2680.8in^3$	$1226.2in^2$
Cone			12m	4m	12.64m	$201.06m^3$	$209.21m^2$
Sphere				30mm		$113097.3mm^3$	$11309.73mm^2$
Sphere				6yd		$904.7yd^3$	$452.38yd^2$
Pyramid (square base)	4ft		4ft		4.47 ft	$21.3ft^3$	$51.7ft^2$
Pyramid (rectangular base)	8m	4m	3m		5m and 3.6m	$32m^3$	$80.84m^2$