

2D Shape Formulas

Shape	Area	Perimeter
Circle	πr^2	$2\pi r$
Square	a^2	$4a$
Rectangle	$l \times b$	$2(l + b)$
Triangle	$\frac{1}{2} \times \text{height} \times \text{base}$	$a + b + c$

2D Shape Formulas

Shape	Area	Perimeter
Parallelogram	$b \times h$	$2(l + b)$
Rhombus	$\frac{1}{2} \times d_1 \times d_2$	$4 \times \text{side}$
Trapezium	$\frac{1}{2} \times h (a + b)$	$a + b + c + d$

3D Shape Formulas

Shape	TSA	LSA (or CSA)	Volume
Cube	$6a^2$	$4a^2$	a^3
Cuboid	$2(lb + bh + hl)$	$2h(l + b)$	$l \times b \times h$
Cone	$\pi r(r + l)$	πrl	$(\frac{1}{3}) \times \pi r^2 h$
Cylinder	$2\pi rh + 2\pi r^2$	$2\pi rh$	$\pi r^2 h$

3D Shape Formulas

Shape	TSA	LSA (or CSA)	Volume
Sphere	$4\pi r^2$	$4\pi r^2$	$(4/3) \times \pi r^3$
Hemisphere	$3\pi r^2$	$2\pi r^2$	$(2/3) \times \pi r^3$