

Geometry Formulas

Chapter 10: Area and Circumference

Perimeter	Square	$P = 4s$
	Rectangle	$P = 2b + 2h$
Circumference	Circle	$C = 2\pi r$
Area	Circle	$A = \pi \cdot r^2$
	Square	$A = s^2$
	Rectangle	$A = b \cdot h$
	Parallelogram	$A = b \cdot h$
	Triangle	$A = \frac{1}{2} \cdot b \cdot h$
		$A = \frac{1}{2}bc(\sin A)$ -- SAS Triangle
	Trapezoid	$A = \frac{1}{2} \cdot (b_1 + b_2) \cdot h$
	Rhombus/Kite	$A = \frac{1}{2} \cdot d_1 \cdot d_2$
	Regular Polygon	$A = \frac{1}{2} \cdot a \cdot P$
Arc Length	$l = \frac{mAB}{360} \cdot 2\pi r$	
Sector of a Circle	$A = \frac{mAB}{360} \cdot \pi \cdot r^2$	

Chapter 11: Surface Area and Volume

Solid	Lateral Area	Surface Area	Volume
Prism	$LA = Ph$	$SA = Ph + 2B$	$V = Bh$
Cylinder	$LA = 2\pi rh$	$SA = 2\pi rh + 2\pi r^2$	$V = \pi r^2 h$
Pyramid	$LA = \frac{1}{2}Pl$	$SA = \frac{1}{2}Pl + B$	$V = \frac{1}{3}Bh$
Cone	$LA = \pi rl$	$SA = \pi rl + \pi r^2$	$V = \frac{1}{3}\pi r^2 h$
Sphere	none	$SA = 4\pi r^2$	$V = \frac{4}{3}\pi r^3$

P = perimeter of base, h = altitude, B = area of base, l = slant height, s = side length