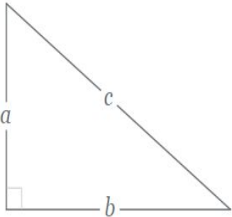
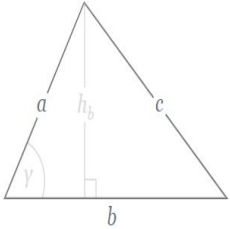
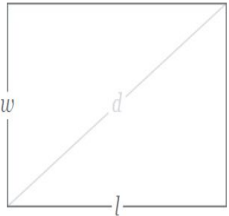
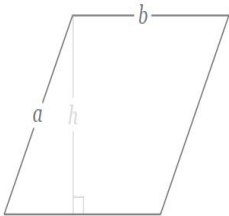
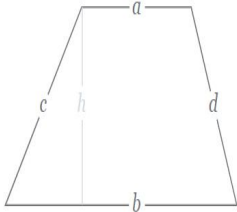
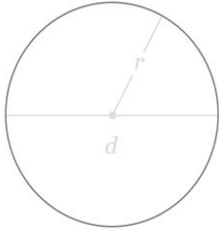

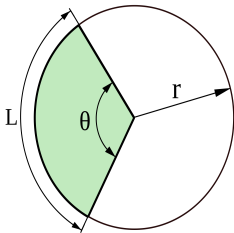
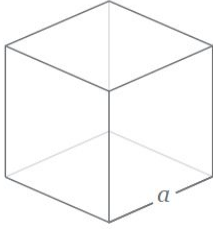
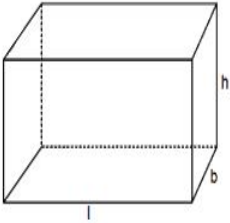
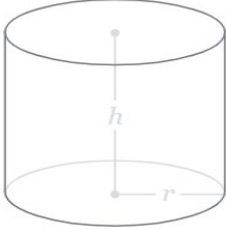
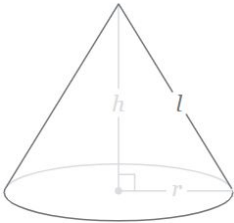




## Geometry Formulas List

Shape	Formulas	Figure
Right Triangle	Pythagoras Theorem: $a^2 + b^2 = c^2$  Area = $\frac{1}{2} ab$  Perimeter = $a + b + \sqrt{a^2 + b^2}$	
Triangle	Perimeter, $P = a + b + c$  Area, $A = \frac{1}{2} b \cdot h$  Height, $h = \frac{2(A)}{b}$	
Rectangle	Perimeter = $2(l + w)$  Area = $l \cdot w$  Diagonal, $d = \sqrt{l^2 + w^2}$	
Parallelogram	Perimeter, $P = 2(a + b)$  Area, $A = b \cdot h$  Height, $h = \frac{A}{b}$	

	<p>Base, <math>b = A/h</math></p>	
Trapezium	<p>Perimeter, <math>P = a + b + c + d</math></p> <p>Area, <math>A = \frac{1}{2}(a + b).h</math></p> <p>Height, <math>h = \frac{2.A}{(a + b)}</math></p> <p>Base, <math>b = \frac{2.(A/h)}{2} - a</math></p>	
Circle	<p>Circumference = <math>2.\pi.r</math></p> <p>Area = <math>\pi.r^2</math></p> <p>Diameter = <math>2.r</math></p>	
Square	<p>Perimeter, <math>P = 4.a</math></p> <p>Area, <math>A = a^2</math></p> <p>Diagonal, <math>d = a.\sqrt{2}</math></p> <p>Side, <math>a = \sqrt{A} = d/\sqrt{2}</math></p>	
Arc	<p>Arc Length, <math>L = r.\theta</math></p> <p>Area, <math>A = \frac{1}{2}.r^2.\theta</math></p> <p>Here, <math>\theta</math> is the central angle in radians.</p>	

<p>Cube</p>	<p>Area, <math>A = 6 \cdot a^2</math></p> <p>Volume, <math>V = a^3</math></p> <p>Edge, <math>a = \sqrt[3]{V}</math></p> <p>Space diagonal = <math>a \cdot \sqrt{3}</math></p>	
<p>Cuboid</p>	<p>Surface Area, <math>A = 2(lb + bh + hl)</math></p> <p>Volume, <math>V = l \cdot b \cdot h</math></p> <p>Space diagonal, <math>d = \sqrt{l^2 + b^2 + h^2}</math></p>	
<p>Cylinder</p>	<p>Total Surface Area, <math>A = 2\pi r h + 2\pi r^2</math></p> <p>Curved Surface Area, <math>A_c = 2\pi r h</math></p> <p>Volume, <math>V = \pi r^2 h</math></p> <p>Base Area, <math>A_b = \pi r^2</math></p> <p>Radius, <math>r = \sqrt{V/\pi h}</math></p>	
<p>Cone</p>	<p>Total Surface Area, <math>A = \pi r(r+l) = \pi r[r + \sqrt{h^2 + r^2}]</math></p> <p>Curved Surface Area, <math>A_c = \pi r l</math></p> <p>Volume, <math>V = \frac{1}{3}\pi r^2 h</math></p> <p>Slant Height, <math>l = \sqrt{h^2 + r^2}</math></p> <p>Base Area, <math>A_b = \pi r^2</math></p>	

Sphere

$$\text{Surface Area, } A = 4\pi r^2$$

$$\text{Volume, } V = \frac{4}{3}\pi r^3$$

$$\text{Diameter} = 2r$$

