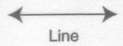
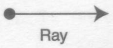
Geometry

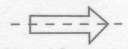
Lines


Line

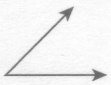

Ray


Parallel Lines

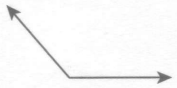
Line Segment

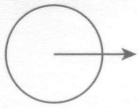

Line of Symmetry

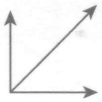
Angles


Acute angle less than 90°


Right angle equals 90°


Obtuse angle greater than 90°


Complete angle rotation equals 360°


Complementary angles two angles add up to 90°


Supplementary angles two angles add up to 180°

Straight angle equals 180°

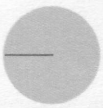
Circles


Arc


Circle


Ellipse


Semicircle


Radius


Diameter


Chord

Polygons


Polygon


Quadrilateral


Rectangle


Rhombus


Trapezoid


Parallelogram

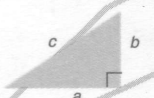

Square


Regular Pentagon


Regular Hexagon


Regular Octagon

Triangles



Right


Isosceles

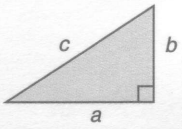

Equilateral

Heron's Formula

Any triangle, given half the length of the perimeter(s) and the lengths of sides *a*, *b*, and *c*.

$$A = \sqrt{s\,(s-a)\,(s-b)\,(s-c)}$$

Pythagorean Theorem



$$c^2 = a^2 + b^2$$

Geometric Formulas

All Perimeters
$P = a + b + c + \ldots$

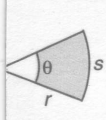
Square
Perimeter $P = 4s$
Area $A = s^2$

Rectangle
Perimeter $P = 2l + 2w$
Area $A = lw$

Circle
Circumference $C = 2\pi r$
Area $A = \pi r^2$

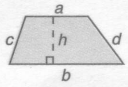
Triangle
Perimeter $P = a + b + c$
Area $A = \frac{1}{2}\,bh$

Parallelogram
Perimeter $P = a + b + c + d$
Area $A = bh$



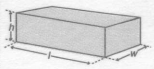
Circular Sector
Area $A = \frac{1}{2}\,r^2\theta$

Circular Ring
Area $A = \pi\,(R^2 - r^2)$

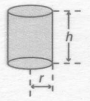


Trapezoid
Perimeter $P = a + b + c + d$
Area $A = \dfrac{(a + b)\,h}{2}$

Sphere
Surface $S = 4\pi r^2$
Volume $V = \dfrac{4\pi r^3}{3}$



Rectangular Box
Surface $S = 2\,(hl + lw + hw)$
Volume $V = lwh$



Right Circular Cylinder
Surface $S = 2\pi rh$
Volume $V = \pi r^2 h$

Right Circular Cone
Surface $S = \pi r\sqrt{r^2 + h^2}$
Volume $V = \frac{1}{3}\,\pi r^2 h$

Frustum of a Cone
Volume $V = \frac{1}{3}\,\pi h(r^2 + rR + R^2)$

Geometry

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http://library.thinkquest.org/2647/geometry/glossary.htm

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