

## Geometric Formulas

Perimeter

Rectangle: P = 2L + 2WSquare: P = 4sTriangle: P = a + b + c

Circumference of a circle:  $P = \pi d$  or  $P = 2\pi r$ 

Area

Circle:  $A = \pi r^2$ Parallelogram: A = bhRectangle: A = LWSquare:  $A = s^2$ 

Trapezoid:  $A = \frac{1}{2}h(b_1 + b_2)$ Triangle:  $A = \frac{1}{2}bh$ 

Volume

Cube:  $V = s^3$ Rectangular solid: V = LWHRegular square pyramid:  $V = 1/3s^2h$ Right circular cylinder:  $V = \pi r^2h$ Right circular cone:  $V = 1/3\pi r^2h$ Sphere:  $V = 4/3\pi r^3$ 

Surface Area

Cube:  $SA = 6s^2$ 

Rectangular Solid: SA = 2LW + 2LH + 2WH

Regular pyramid: $SA = s^2 + 2s/$ Right circular cone: $SA = \pi r^2 + \pi r/$ Right circular cylinder: $SA = 2\pi r^2 + 2\pi rh$ Sphere: $SA = 4\pi r^2$ 

Pythagorean Theorem:  $a^2 + b^2 = c^2$ 

Angles of a Triangle:  $\angle a + \angle b + \angle c = 180^{\circ}$ 

Complementary angles are two angles whose measurements have the sum of 90°. Supplementary angles are two angles whose measurements have the sum of 180°.

Scalene triangles have **no** side of equal length.

Isosceles triangles have **two** sides of equal length.

Equilateral triangles have three sides of equal length.