

Geometric Formulas

$$\angle a + \angle b + \angle c = 180^\circ$$

Perimeter

Rectangle: $P = 2L + 2W$

Square: $P = 4s$

Triangle: $P = a + b + c$

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

Area

Circle: $A = \pi r^2$

Parallelogram: $A = bh$

Rectangle: $A = LW$

Square: $A = s^2$

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

Triangle: $A = \frac{1}{2}bh$

Volume

Cube: $V = s^3$

Rectangular solid: $V = LWH$

Regular square pyramid: $V = \frac{1}{3}s^2h$

Right circular cylinder: $V = \pi r^2h$

Sphere: $V = \frac{4}{3}\pi r^3$

Surface Area

Cube: $SA = 6s^2$

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

Regular pyramid: $SA = s^2 + 2sl$

Right circular cone: $SA = \pi r^2 + \pi rl$

Right circular cylinder: $SA = 2\pi r^2 + 2\pi rh$

Sphere: $SA = 4\pi r^2$

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.

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