

Formulas

Square

$$P = 4s$$

$$A = s^2$$

Rectangle

$$P = 2L + 2w$$

$$A = Lw$$

Parallelogram

$$P = 2b + 2c$$

$$A = bh$$

Trapezoid

$$P = b_1 + c + b_2 + d$$

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

Circle

$$C = \pi d = 2\pi r$$

$$A = \pi r^2$$

Triangle

$$P = a + b + c$$

$$A = \frac{1}{2}bh \quad \text{or}$$

$$s = \frac{a+b+c}{2}$$

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

Regular Hexagon

$$P = 6a$$

$$d = 2a$$

$$f = a\sqrt{3}$$

$$A = \frac{3a^2\sqrt{3}}{2}$$

Cube

$$SA = 6s^2$$

$$V = s^3$$

Sphere

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

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

Rectangular Prism

$$SA = 2Lw + 2Lh + 2wh$$

$$V = Lwh$$

Prism

$$L = ph$$

$$SA = 2B + L$$

$$V = Bh$$

Pyramid

$$L = \frac{1}{2}ps$$

$$SA = L + B$$

$$V = \frac{1}{3}Bh$$

Cylinder

$$L = 2\pi rh$$

$$SA = 2\pi rh + 2\pi r^2$$

$$V = \pi r^2 h$$

Cone

$$L = \pi rs$$

$$SA = \pi rs + \pi r^2$$

$$V = \frac{1}{3}\pi r^2 h$$

Frustum of a Pyramid

$$L = \frac{1}{2}(p_1 + p_2)s$$

$$SA = L + B_1 + B_2$$

$$V = \frac{1}{3}(B_1 + B_2 + \sqrt{B_1 B_2})h$$

Frustum of a Cone

$$L = \pi(r_1 + r_2)s$$

$$SA = L + \pi r_1^2 + \pi r_2^2$$

$$V = \frac{1}{3}\pi(r_1^2 + r_2^2 + r_1 r_2)h$$

Pythagorean Theorem

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

Sectors

$$S = r\theta$$

$$A = \frac{1}{2}r^2\theta$$