

Distance Formula

Midpoint Formula

Cylinder Volume

Prism Volume

*Circle Area
and Circumference*

Parallelogram Area

Sphere Volume

Trapezoid Area

Triangle Area

Cone Volume

Pythagorean Theorem

Equation of a Line

*Rectangular Pyramid
Volume*

Sine, Cosine, Tangent Ratios

$$\left(\frac{x_1 + x_2}{2}, \frac{y_1 + y_2}{2}\right) \text{ or}$$

(Average of x's, Average of y's)

$$d = \sqrt{(x_2 - x_1)^2 + (y_2 - y_1)^2}$$

$$V = (\text{Base Area}) * \text{depth}$$

Rectangular prism or box: $V = l * w * h$

$$V = \pi * \text{radius}^2 * \text{height}$$

[circle base Area * height]

$$A = \text{base} * \text{height}$$

(b and h must meet at 90°)

$$\text{Area} = \pi * \text{radius}^2$$

Circumf. (Perimeter) = $\pi * \text{diameter}$

$$A = \frac{1}{2}(b_1 + b_2) * \text{height} \quad \text{or}$$

(average of bases) * height

$$V = \frac{4}{3} * \pi * \text{radius}^3$$

$$V = \frac{1}{3} * \pi * \text{radius}^2 * \text{height}$$

(Tip: cone holds 1/3 as much as cylinder)

$$A = \frac{1}{2} * \text{base} * \text{height}$$

(b and h must meet at 90°)

$$y - y_1 = m(x - x_1)$$

m is slope and point is (x_1, y_1)

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

where c is hypotenuse
use when missing only 1 side of right triangle

SohCahToa

$$\sin(\theta) = \frac{\text{opp}}{\text{hyp}} \quad \cos(\theta) = \frac{\text{adj}}{\text{hyp}} \quad \tan(\theta) = \frac{\text{opp}}{\text{adj}}$$

$$V = \frac{1}{3} * \text{length} * \text{width} * \text{height}$$

(Tip: pyramid holds 1/3 as much as box)