

High School Mathematics Reference Sheet



Pi: $\pi \approx 3.14$

FORMULAS FOR PLANE FIGURES

Parallelogram: $A = bh$

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

Right Triangle:

Pythagorean Theorem

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

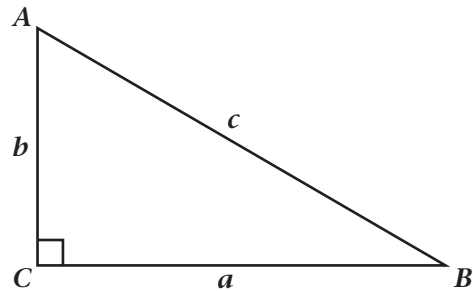
Trigonometric Ratios

$$\sin A = \frac{a}{c} \quad \cos A = \frac{b}{c} \quad \tan A = \frac{a}{b}$$

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

Circle: $C = 2\pi r$

$$A = \pi r^2$$



FORMULAS FOR SOLID FIGURES

Prism: $V = Bh$
 $LA = ph$

Right Cylinder: $V = \pi r^2 h$
 $SA = 2\pi r^2 + 2\pi rh$

Sphere: $V = \frac{4}{3}\pi r^3$
 $SA = 4\pi r^2$

LA represents the lateral surface area.
SA represents the total surface area.
B represents the area of the base.
p represents the perimeter of the base.
l represents the slant height.

Right Cone: $V = \frac{1}{3}\pi r^2 h$
 $SA = \pi r(l + r)$

Regular Pyramid: $V = \frac{1}{3}Bh$
 $SA = B + \frac{1}{2}pl$