

# Geometric Formulas

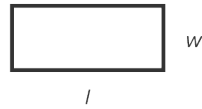
**Square**



$$P = 4s$$

$$A = s^2$$

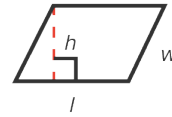
**Rectangle**



$$P = 2l + 2w$$

$$A = lw$$

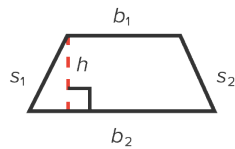
**Parallelogram**



$$P = 2l + 2w$$

$$A = lh$$

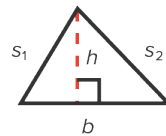
**Trapezoid**



$$P = s_1 + s_2 + b_1 + b_2$$

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

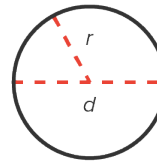
**Triangle**



$$P = s_1 + s_2 + b$$

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

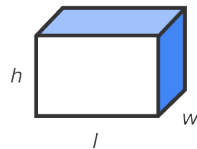
**Circle**



$$C = 2\pi r \text{ or } C = \pi d$$

$$A = \pi r^2$$

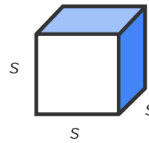
**Rectangular Solid**



$$S = 2lh + 2wh + 2wl$$

$$V = lwh$$

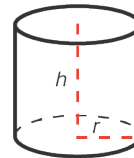
**Cube**



$$S = 6s^2$$

$$V = s^3$$

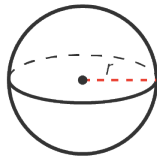
**Right Circular Cylinder**



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

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

**Sphere**



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

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

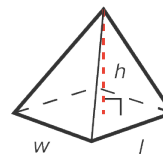
**Right Circular Cone**



$$S = \pi r \sqrt{r^2 + h^2} + \pi r^2$$

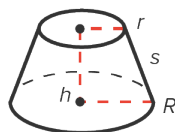
$$V = \frac{1}{3}\pi r^2 h$$

**Square or Rectangular Pyramid**



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

**Right Circular Cone Frustum**



$$S = \pi s(R + r) + \pi r^2 + \pi R^2$$

$$V = \frac{\pi(r^2 + rR + R^2)h}{3}$$

**Geometric Symbols**

A = Area  
P = Perimeter  
V = Volume

S = Surface Area  
C = Circumference  
 $\pi$  = Pi Constant