

Summary of Perimeter and Area Formulas

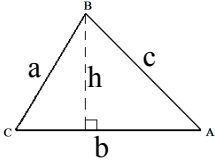
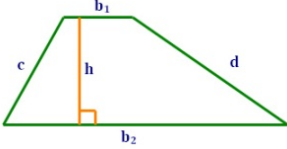
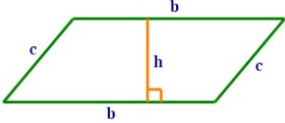
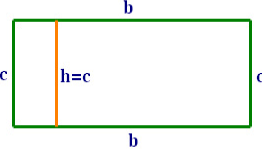
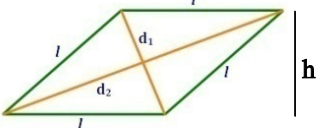
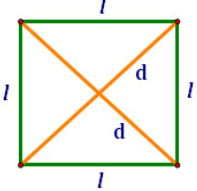
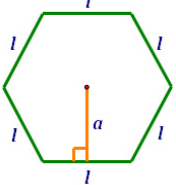
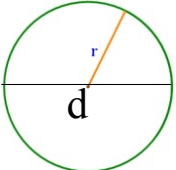
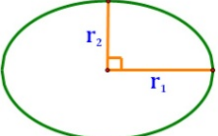
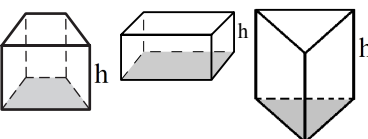
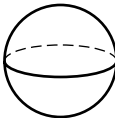
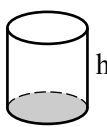
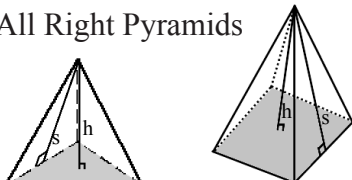
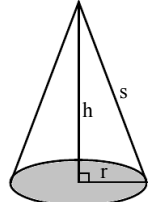
Shape	Figure	Perimeter	Area
Triangle		$P = a + b + c$ <i>a, b, c = sides</i>	$A = \frac{b h}{2}$ <i>b = base</i> <i>h = height</i>
Trapezoid		$P = b_1 + b_2 + c + d$ <i>b₁, b₂ = bases</i> <i>c, d = sides</i>	$A = \frac{h (b_1 + b_2)}{2}$ <i>b₁, b₂ = bases</i> <i>h = height</i>
Parallelogram		$P = 2 (b + c)$ <i>b, c = sides</i>	$A = b h$ <i>b = base</i> <i>h = height</i>
Rectangle		$P = 2 (b + c)$ <i>b, c = sides</i>	$A = b h$ <i>b = base</i> <i>h = height</i>
Rhombus		$P = 4 l$ <i>l = side</i>	$A = l h$ or $A = \frac{d_1 d_2}{2}$ <i>d₁, d₂ = diagonals</i>
Square		$P = 4 l$ <i>l = side</i>	$A = l^2$
Regular Polygon		$P = n l$ <i>n = number of sides</i> <i>l = side</i>	$A = \frac{1}{2} n a l$ <i>a = apothem ; l = side</i> <i>n = number of sides</i>
Circle		$C = 2 \pi r$ <i>r = radius</i> <i>d = diameter</i> $\pi = \text{pie} = 3.14$	$A = \pi r^2$ <i>r = radius</i> $\pi = \text{pie} = 3.14$
Ellipse		$P \approx 2\pi \sqrt{\frac{1}{2}(r_1^2 + r_2^2)}$ <i>r₁ = major axis radius</i> <i>r₂ = minor axis radius</i>	$A = \pi r_1 r_2$ <i>r₁ = major axis radius</i> <i>r₂ = minor axis radius</i>

Figure	Formulas for Volume (V) and Surface Area (SA)
<p>All Prisms</p> 	$V = B h = \text{Base area} \times \text{height}$ $SA = 2 B + h P = 2 \times \text{Base area} + \text{height} \times \text{base Perimeter}$
<p>Sphere</p> 	$V = \frac{4 \pi r^3}{3} = \frac{4 \times \pi \times r^3}{3}$ $SA = 4 \pi r^2 = 4 \times \pi \times r^2$ <p style="text-align: right;">$r = \text{radius}$</p>
<p>Right Circular Cylinder</p> 	$V = B h = \text{Base area} \times \text{height}$ $SA = 2 B + C h = (2 \times \text{Base area}) + (\text{Circumference} \times \text{height})$
<p>All Right Pyramids</p> 	$V = \frac{B h}{3} = \frac{\text{Base area} \times \text{height}}{3}$ $SA = B + \frac{P s}{2} = \text{Base area} + \frac{(\text{base Perimeter} \times \text{slant height})}{2}$
<p>Right Circular Cone</p> 	$V = \frac{B h}{3} = \frac{\text{Base area} \times \text{height}}{3}$ $SA = B + \pi r s = \text{Base area} + (\text{Pi} \times \text{radius} \times \text{slant height})$

SA : Surface Area

V : Volume

P : base Perimeter

C : base Circumference

B : Base area

l : length

w : width

h : height

s : slant height

r : radius