Geometry Formulas Areas and Perimeters

Figure	Sketch	Area	Perimeter

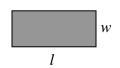
Square



 $A = s^2$

$$P = 4s$$

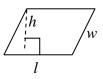
Rectangle



A = lw

$$P = 2l + 2w$$

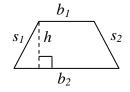
Parallelogram



A = lh

$$\mathbf{P} = 2l + 2w$$

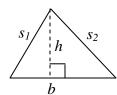
Trapezoid



 $A = \frac{1}{2}h(b_1 + b_2)$ $P = s_1 + s_2 + b_1 + b_2$

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

Triangle



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

$$P = s_1 + s_2 + b$$

Area and Circumference of a Circle

Circle



 $A = \pi * r^2$

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

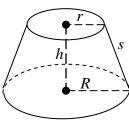
Volumes and Surface Areas of Three- Dimensional Figures

Figure	Sketch	Volume	Surface Area (S)
Rectangular Solid	h l	V = lwh	S = 2lh + 2wh + 2wl
Cube	s s	$V = s^3$	$S = 6s^2$
Right Circular Cylinder	h	$V = \pi * r^2 h$	$S = 2\pi * rh + 2\pi * r^2$
Sphere	•	$V = \frac{4}{3}\pi * r^3$	$S = 4\pi * r^2$
Right Circular Cone	h in r.	$V = \frac{1}{3}\pi * r^2 h$	$S = \pi * r\sqrt{r^2 + h^2}$
Square or Rectangular Pyramid	h	$V = \frac{1}{3}lwh$	

Frustum of

Right Circular

Cone



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