
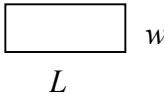
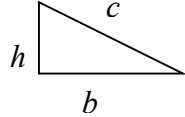
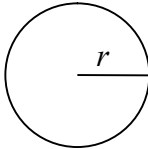
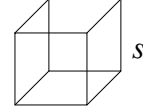
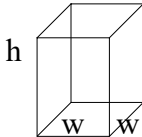

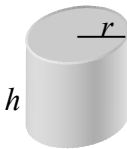
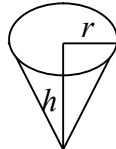


These are the Geometric formulas you must know.

Shape	image	Area	Perimeter
Square		$A = s^2$	$P = 4s$
Rectangle		$A = Lw$	$P = 2L + 2w$
Rt. Triangle		$A = \frac{1}{2}bh$	$P = h + b + c$
Circle		$A = \pi r^2$	$C = 2\pi r$
Cube		$V = s^3$	$SurfaceArea = 6s^2$
Box with a square base		$V = w^2h$	$SurfaceArea = 2w^2 + 4wh$
Rectangular Box		$V = Lwh$	$SurfaceArea = 2Lw + 2Lh + 2wh$
Right Cylinder		$V = \pi r^2h$	$SurfaceArea = 2\pi rh + 2\pi r^2$
Right Cone		$V = \frac{1}{3}\pi r^2h$	$SurfaceArea = \pi r^2 + \pi r\sqrt{r^2 + h^2}$ (usually given)
Sphere		$V = \frac{4}{3}\pi r^3$	$SurfaceArea = 4\pi r^2$

*Other Formulas*

1. Equation of a circle  $(x - h)^2 + (y - k)^2 = r^2$   $r$  is the radius and  $(h, k)$  is the center

2. Distance of a line segment  $(x_1, y_1)$  and  $(x_2, y_2)$  is  $d = \sqrt{(x_2 - x_1)^2 + (y_2 - y_1)^2}$

3. Midpoint between two points  $(x_1, y_1)$  and  $(x_2, y_2)$  is  $\left(\frac{x_1 + x_2}{2}, \frac{y_1 + y_2}{2}\right)$

4. Pythagorean Theorem  $c^2 = a^2 + b^2$

$$c = \sqrt{a^2 + b^2} \quad \text{or} \quad b = \sqrt{c^2 - a^2}$$