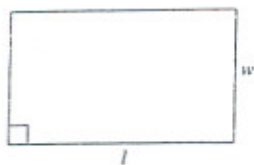


# GEOMETRIC FORMULAS

**Rectangle**



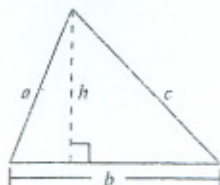
Perimeter:  $P = 2l + 2w$   
 Area:  $A = lw$

**Square**



Perimeter:  $P = 4s$   
 Area:  $A = s^2$

**Triangle**



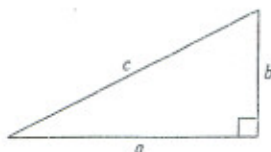
Perimeter:  $P = a + b + c$   
 Area:  $A = \frac{1}{2}bh$

**Sum of Angles of Triangle**



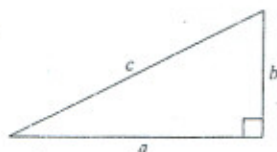
$A + B + C = 180^\circ$   
 The sum of the measures of the three angles is  $180^\circ$ .

**Right Triangle**



Perimeter:  $P = a + b + c$   
 Area:  $A = \frac{1}{2}ab$   
 One  $90^\circ$  (right) angle

**Pythagorean Theorem (for right triangles)**



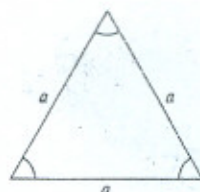
$a^2 + b^2 = c^2$

**Isosceles Triangle**



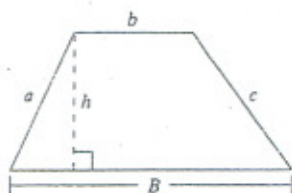
Triangle has:  
 two equal sides and  
 two equal angles.

**Equilateral Triangle**



Triangle has:  
 three equal sides and  
 three equal angles.  
 Measure of each angle is  $60^\circ$ .

**Trapezoid**



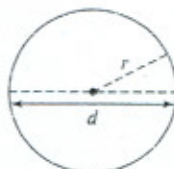
Perimeter:  
 $P = a + b + c + B$   
 Area:  $A = \frac{1}{2}h(B + b)$

**Parallelogram**



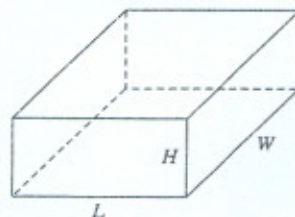
Perimeter:  $P = 2a + 2b$   
 Area:  $A = bh$

**Circle**



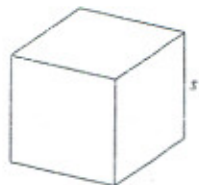
Circumference:  $C = \pi d$   
 $C = 2\pi r$   
 Area:  $A = \pi r^2$

**Rectangular Solid**



Volume:  $V = LWH$   
 Surface Area:  
 $S = 2LW + 2HL + 2HW$

**Cube**



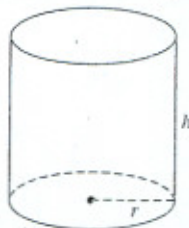
Volume:  $V = s^3$   
 Surface Area:  $S = 6s^2$

**Cone**



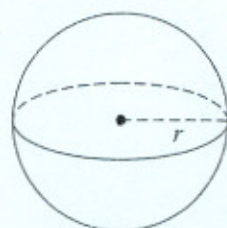
Volume:  $V = \frac{1}{3}\pi r^2 h$

**Right Circular Cylinder**



Volume:  $V = \pi r^2 h$   
 Surface Area:  
 $S = 2\pi r^2 + 2\pi rh$

**Sphere**



Volume:  $V = \frac{4}{3}\pi r^3$   
 Surface Area:  $S = 4\pi r^2$

**Other Formulas**

Distance:  $d = rt$  ( $r$  = rate,  $t$  = time)

Percent:  $p = br$  ( $p$  = percentage,  $b$  = base,  $r$  = rate)

Temperature:  $F = \frac{9}{5}C + 32$      $C = \frac{5}{9}(F - 32)$

Simple Interest:  $I = Prt$

( $P$  = principal,  $r$  = annual interest rate,  
 $t$  = time in years)