

**MATHEMATICAL SYMBOLS, ABBREVIATIONS, AND FORMULAS****Definitions**

+	add	>	is greater than		right angle
–	subtract	<	is less than	$\overline{AB}$	line segment AB
•	multiply	$\geq$	is greater than or equal to	$\overleftrightarrow{AB}$	line AB
$\div$	divide	$\leq$	is less than or equal to	AB	length of $\overline{AB}$
=	is equal to	π	≈ 3.14	$\frac{a}{b}$ or $a : b$	ratio of a to b
$\neq$	is not equal to	$\angle$	angle		

Abbreviations for Units of Measurement

U.S. Customary			Metric System					
Distance	in.	inch	Distance	m	meter	Time	sec.	second
	ft.	foot		km	kilometer		min.	minute
	mi.	mile		cm	centimeter		hr.	hour
				mm	millimeter			
Volume	gal.	gallon	Volume	L	liter			
	qt.	quart		ml or mL	milliliter			
	oz.	fluid ounce		cm³ or cc	cubic centimeter			
Weight	lb.	pound	Mass	g	gram			
	oz.	ounce		kg	kilogram			
				mg	milligram			
Temperature	°F	degree Fahrenheit	Temperature	°C	degree Celsius			
Speed	mph	miles per hour						

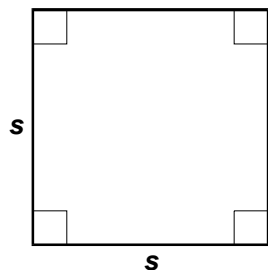
Conversions for Units of Measurement

U.S. Customary		Metric System	
Length	12 inches = 1 foot	Length	10 millimeters = 1 centimeter
	3 feet = 1 yard		100 centimeters = 1 meter
	5280 feet = 1 mile		1000 meters = 1 kilometer
Volume (liquid)	8 ounces = 1 cup	Volume	1000 milliliters = 1 liter
	2 cups = 1 pint		1000 liters = 1 kiloliter
	2 pints = 1 quart		
	4 quarts = 1 gallon		
Weight	16 ounces = 1 pound	Weight	1000 milligrams = 1 gram
	2000 pounds = 1 ton		1000 grams = 1 kilogram



Geometric Figures

Square



$$\text{Area} = s^2$$

$$\text{Perimeter} = 4s$$

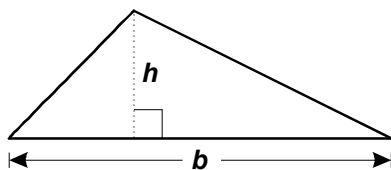
Rectangle



$$\text{Area} = \ell w$$

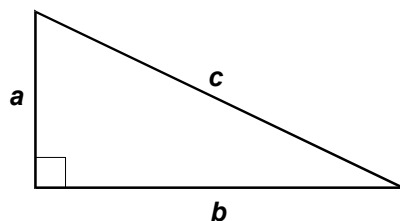
$$\text{Perimeter} = 2\ell + 2w$$

Triangle



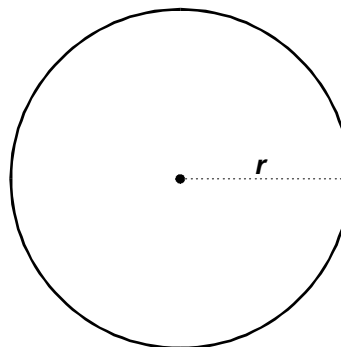
$$\text{Area} = \frac{1}{2}bh$$

Right triangle



$$\text{Pythagorean formula: } c^2 = a^2 + b^2$$

Circle

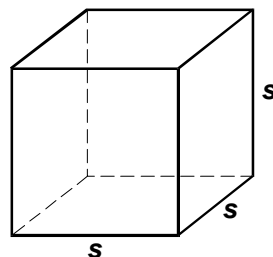


$$\text{Area} = \pi r^2$$

$$\text{Circumference} = 2\pi r$$

$$\text{Diameter} = 2r$$

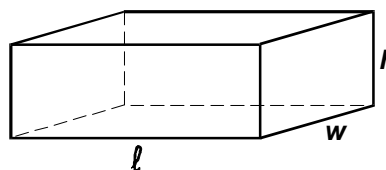
Cube



$$\text{Surface area} = 6s^2$$

$$\text{Volume} = s^3$$

Rectangular solid



$$\text{Surface area} = 2\ell w + 2\ell h + 2wh$$

$$\text{Volume} = \ell wh$$