



## Summative Assessment Mathematics Grade 7 Reference Sheet

Shape	Area	Circumference	<b>Key</b> <i>b</i> = base <i>l</i> = length <i>h</i> = height <i>w</i> = width <i>B</i> = area of base <i>s</i> = side length <i>H</i> = height of triangular prism <i>s</i> <sub>1</sub> , <i>s</i> <sub>2</sub> , <i>s</i> <sub>3</sub> are the lengths of each side of the triangular base <i>d</i> = diameter <i>r</i> = radius  Use 3.14 for $\pi$ .
Circle	$A = \pi r^2$	$C = \pi d = 2\pi r$	
Triangle	$A = \frac{1}{2}bh$	<b>Perimeter</b>	
Rectangle	$A = lw$	$P = 2l + 2w = 2(l + w)$	
Trapezoid	$A = \frac{1}{2}h(b_1 + b_2)$		
Parallelogram	$A = bh$		
Square	$A = s^2$		

Percent Change
$\% \text{ change} = \frac{\text{difference in amount}}{\text{original amount}}$

3 – Dimensional Shape	Volume	Surface Area
Rectangular Prism	$V = lwh = Bh$	$SA = 2lw + 2lh + 2wh = 2B + 2lh + 2wh$
Triangular Prism	$V = \frac{1}{2}lwh = Bh$	$SA = bh + (s_1 + s_2 + s_3)H = 2B + (s_1 + s_2 + s_3)H$

Standard Units	Metric Units
<b>Conversions – Length</b>	
1 yard (yd) = 3 feet (ft) = 36 inches (in.)	1 meter (m) = 100 centimeters (cm)
1 mile (mi) = 1,760 yards (yd) = 5,280 feet (ft)	1 meter (m) = 1,000 millimeters (mm)
	1 kilometer (km) = 1,000 meters (m)
<b>Conversions – Volume</b>	
1 cup = 8 fluid ounces (fl oz)	1 liter (l) = 1,000 milliliters (ml)
1 pint (pt) = 2 cups	1 liter (l) = 1,000 cubic centimeters (cu. cm)
1 quart (qt) = 2 pints (pt)	
1 gallon (gal.) = 4 quarts (qt)	
<b>Conversions – Weight/Mass</b>	
1 pound (lb) = 16 ounces (oz)	1 gram (g) = 1,000 milligrams (mg)
1 ton = 2,000 pounds (lb)	1 kilogram (kg) = 1,000 grams (g)