

## Mathematics

### High School Assessment Reference Sheet

1 inch = 2.54 centimeters  
 1 meter = 39.37 inches  
 1 mile = 5280 feet  
 1 mile = 1760 yards  
 1 mile = 1.609 kilometers

1 kilometer = 0.62 mile  
 1 pound = 16 ounces  
 1 pound = 0.454 kilograms  
 1 kilogram = 2.2 pounds  
 1 ton = 2000 pounds

1 cup = 8 fluid ounces  
 1 pint = 2 cups  
 1 quart = 2 pints  
 1 gallon = 4 quarts  
 1 gallon = 3.785 liters  
 1 liter = 0.264 gallons  
 1 liter = 1000 cubic centimeters

Triangle	$A = \frac{1}{2}bh$
Parallelogram	$A = bh$
Circle	$A = \pi r^2$
Circle	$C = \pi d$ or $C = 2\pi r$
General Prisms	$V = Bh$
Cylinder	$V = \pi r^2 h$
Sphere	$V = \frac{4}{3}\pi r^3$
Cone	$V = \frac{1}{3}\pi r^2 h$
Pyramid	$V = \frac{1}{3}Bh$

Quadratic Formula	$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$
Arithmetic Sequence	$a_n = a_1 + (n - 1)d$
Geometric Sequence	$a_n = a_1 r^{n-1}$
Geometric Series	$S_n = \frac{a_1 - a_1 r^n}{1 - r}$ where $r \neq 1$
Radians	1 radian = $\frac{180}{\pi}$ degrees
Degrees	1 degree = $\frac{\pi}{180}$ radians