## Algebra I Reference Sheet

| 1 inch $=2.54$ centimeters | 1 kilometer $=0.62$ miles | 1 cup $=8$ fluid ounces |
| :--- | :--- | :--- |
| 1 meter $=39.37$ inches | 1 pound $=16$ ounces | 1 pint $=2$ cups |
| 1 mile $=5,280$ feet | 1 pound $=0.454$ kilograms | 1 quart $=2$ pints |
| 1 mile $=1,760$ yards | 1 kilogram $=2.2$ pounds | 1 gallon $=4$ quarts |
| 1 mile $=1.609$ kilometers | 1 ton $=2,000$ pounds | 1 gallon $=3.785$ liters |
|  |  | 1 liter $=0.264$ gallons |
|  |  | 1 liter $=1000$ cubic centimeters |


| Area (A) |  |
| :---: | :---: |
| Triangle | $A=\frac{1}{2} b h$ |
| Parallelogram | $A=b h$ |
| Circle | $A=\pi r^{2}$ |
| Circumference (C) |  |
| Circle | $C=\pi d$ or $C=2 \pi r$ |
| Volume (V) |  |
| General Prism | $V=B h$ |
| Cylinder | $V=\pi r^{2} h$ |
| Sphere | $V=\frac{4}{3} \pi r^{3}$ |
| Cone | $V=\frac{1}{3} \pi r^{2} h$ |
| Pyramid | $V=\frac{1}{3} B h$ |


| General Formulas |  |
| :---: | :---: |
| Pythagorean Theorem | $a^{2}+b^{2}=c^{2}$ |
| Quadratic Formula | $x=\frac{-b \pm \sqrt{b^{2}-4 a c}}{2 a}$ |
| Arithmetic Sequence | $a_{n}=a_{1}+(n-1) d$ |
| Geometric Sequence | $a_{n}=a_{1} \cdot r^{n-1}$ |
| Exponential <br> Growth/Decay | $y=a \cdot b^{x}$ |
| Compound Interest | $A=P\left(1+\frac{r}{n}\right)^{n \cdot t}$ |

