

## 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 = 1,000 cubic centimeters |

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

| <b>General Formulas</b>  |   |
|--------------------------|---|
| Pythagorean Theorem      | $a^2 + b^2 = c^2$                           |
| Quadratic Formula        | $x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$    |
| Arithmetic Sequence      | $a_n = a_1 + (n - 1)d$                      |
| Geometric Sequence       | $a_n = a_1 \cdot r^{n-1}$                   |
| Exponential Growth/Decay | $y = a \cdot b^x$                           |
| Compound Interest        | $A = P \left( 1 + \frac{r}{n} \right)^{nt}$ |

## Grade 8 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 = 1,000 cubic centimeters |

| <b>Area (<i>A</i>)</b>          |                             |
|---------------------------------|-----------------------------|
| Triangle                        | $A = \frac{1}{2}bh$         |
| Parallelogram                   | $A = bh$                    |
| Circle                          | $A = \pi r^2$               |
| <b>Circumference (<i>C</i>)</b> |                             |
| Circle                          | $C = \pi d$<br>$C = 2\pi r$ |
| <b>Volume (<i>V</i>)</b>        |                             |
| General Prism                   | $V = Bh$                    |
| Cylinder                        | $V = \pi r^2 h$             |
| Sphere                          | $V = \frac{4}{3}\pi r^3$    |
| Cone                            | $V = \frac{1}{3}\pi r^2 h$  |

| <b>General Formulas</b> |                   |
|-------------------------|-------------------|
| Pythagorean Theorem     | $a^2 + b^2 = c^2$ |

## Grade 7 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 = 1,000 cubic centimeters |

|                                 |                             |
|---------------------------------|-----------------------------|
| <b>Area (<i>A</i>)</b>          |                             |
| Triangle                        | $A = \frac{1}{2}bh$         |
| Parallelogram                   | $A = bh$                    |
| Circle                          | $A = \pi r^2$               |
| <b>Circumference (<i>C</i>)</b> |                             |
| Circle                          | $C = \pi d$<br>$C = 2\pi r$ |
| <b>Volume (<i>V</i>)</b>        |                             |
| General Prism                   | $V = Bh$                    |

## Grade 6 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 = 1,000 cubic centimeters |

|                          |                       |
|--------------------------|-----------------------|
| <b>Area (<i>A</i>)</b>   |                       |
| Triangle                 | $A = \frac{1}{2}bh$   |
| <b>Volume (<i>V</i>)</b> |                       |
| Right Rectangular Prism  | $V = lwh$<br>$V = Bh$ |

## Grade 5 Reference Sheet

|                      |                      |                                   |
|----------------------|----------------------|-----------------------------------|
| 1 mile = 5,280 feet  | 1 pound = 16 ounces  | 1 cup = 8 fluid ounces            |
| 1 mile = 1,760 yards | 1 ton = 2,000 pounds | 1 pint = 2 cups                   |
|                      |                      | 1 quart = 2 pints                 |
|                      |                      | 1 gallon = 4 quarts               |
|                      |                      | 1 liter = 1,000 cubic centimeters |

| <b>Volume (<math>V</math>)</b> |   |
|--------------------------------|---|
| Right Rectangular Prism        | $V = l \times w \times h$<br>$V = B \times h$ |