## Geometry Summer Assignment

In addition to the Algebra review, this assignment introduces several basic geometric terms. You will be tested on both the Algebra skills and Geometric vocabulary within the first week of

## Geometry Vocabulary

| Vocabulary | Definition/ Description | Example |
| :---: | :---: | :---: |
| Acute angle | An acute with a degree measure greater than 0 and less than 90. |  |
| Adjacent angles | Adjacent angles are angles that lie in the same plane and have a common vertex and a common side but no common interior points. | $\angle A B C$ and $\angle C B D$ are adjacent angles |
| Angle | The inter section of two noncollinear rays at a common endpoint. The rays are called sides and the common endpoint is called the vertex. |  <br> $\angle A$ or $\angle B A C$ |
| Angle bisector | A ray that divides an angle into two congruent angles. |  $\angle R P Q \cong \angle Q P S$ |
| Collinear | Points that lie on the same line. | Point $P, M, Q$ are collinear |


| Complementary angles | Two angles that measures that have a sum of 90 degrees. |  |
| :---: | :---: | :---: |
| Congruent | Having the same measures. | $\cong$ is used to show congruent |
| Coplanar | Points that lie on the same plane. | Points $X, Y Z$ are coplanar |
| Line | A basic undefined term of Geometry. A line is made up of points that have no thickness or width. Line is shown with arrowhead at each end. Usually named by a lower case script letter or by two capital letters for two points on the line with a line with double arrows over the pair of letters. |  |
| Line Segment | A measurable part of a line that consists of two points, called endpoints and all of the points between them. Usually named by a two capital letters for two points on the segment with a line (with no arrows) over the pair of letters. |  |
| Midpoint | The point on a segment exactly halfway between the endpoints. | $\underset{\sim}{\square} \quad \stackrel{Y}{\bullet}$ <br> $M$ is the midpoint of $\overline{X Y}$ then $\overline{X M} \cong \overline{M Y}$ |


| Obtuse angle | An angles with a degree measure greater than 90 but less than 180. |  |
| :---: | :---: | :---: |
| Opposite rays | Two collinear rays with a common endpoint extending in different directions. | $\overrightarrow{P R}$ and $\overrightarrow{P Q}$ are opposite rays |
| Parallel lines | Coplanar lines that do not intersect. |  |
| Perpendicular lines | Lines that intersect to form right angles. | $\overleftrightarrow{A D} \perp \overleftrightarrow{B C}$ |
| Plane | A basic undefined term of geometry. A plane is a flat surface made up of points that has no depth and extends indefinitely in all directions. It is represented by a slanted four-sided figure. Planes are usually names by a capital script letter or by three noncollinear points on the plane. | Plane XYZ or Plane $\mathcal{T}$ |
| Point | A basic undefined term of geometry. A point is a location represented by a dot. Points are named by capital printed letter. | ${ }^{\bullet} P$ |
| Ray | A ray is part of a line. It has one endpoint extending indefinitely in one direction. . Usually named by a two capital letters for two points on the ray with a line with one arrow over the pair of letters. |  |


| Right Angle | An angle with a degree measure equal to 90. |  |
| :---: | :---: | :---: |
| Segment bisector | A segment, line or plane that intersects a segment at its midpoint. |  |
| Supplementary angles | Two angles that measures that have a sum of 180 degrees. |  <br> $\angle E F H$ and $\angle H F G$ are supplementary. $\angle M$ and $\angle N$ are supplementary. |

