

**Postulate 1-1**

Through any two points there is exactly one line.

**Postulate 1-2**

If two distinct lines intersect, then they intersect in exactly one point.

**Postulate 1-3**

If two distinct planes intersect, then they intersect in exactly one line.

**Postulate 1-4**

Through any three noncollinear points there is exactly one plane.

**Postulate 1-5 – Ruler Postulate**

Every point on a line can be paired with a real number.

**Postulate 1-6 – Segment Addition Postulate**

If three points A, B and C are collinear and B is between A and C, then  $AB + BC = AC$

**Postulate 1-8 – Angle Addition Postulate**

If point B is in the interior of  $\angle AOC$ , then  $m\angle AOB + m\angle BOC = m\angle AOC$

**Postulate 1-9 – Linear Pair Postulate**

If two angles form a linear pair, then they are supplementary.

Vocabulary Terms:

<b>Term</b>	<b>Definition</b>	<b>Picture</b>
Point	Indicates a location and has no size	
Line	Represented by straight path that extends in two opposite directions. Contains infinitely many points	
Plane	Represented by a flat surface that extends without end. Contains infinitely many lines.	
Collinear	Points that lie on same line	
Coplanar	Points and line in same plane	
Segment	Part of a line that consists of 2 endpoints and all points between	
Ray	Part of a line that consists of one endpoint and all points on the line on one side of the endpoint.	
Opposite rays	2 rays that share same endpoint and form a line	
Adjacent Angles	2 angles with common side and vertex and no common interior points.	
Vertical Angles	Two angles whose sides are opposite rays	
Complementary Angles	2 angles whose sum is $90^\circ$	
Supplementary Angles	Two angles whose sum is 180 degrees.	
Angle	Formed by two rays with same end point; sides are rays, endpoint is vertex	
Acute angle	Angle with measure $0^\circ < x < 90^\circ$	
Right Angle	Angle whose measure is exactly 90 degrees	
Obtuse Angle	Angle whose measure, x, is $90 < x < 180$	
Straight angle	Angle whose measure is $180^\circ$	
Linear Pair	Pair of adjacent angles whose non-common sides are opposite rays	
Parallel Lines	Two lines that do not intersect	
Perpendicular Lines	Two lines that intersect at $90^\circ$	
Angle Bisector	Ray that divides an angle into 2 congruent angles	
Intersection	Set of points the figures have in common	