Geometry

Triangles and Angles:

Acute Angle- an angle greater than 0^o and less than 90^o.

Acute Triangle- a triangle with each of its three angles less than 90^o.

Adjacent Angle- angles that share a common side and vertex, but do not overlap.

Alternate Exterior Angle- angles on opposite sides of the transversal and outside the lines.

Alternate Interior Angle- angles on the opposite sides of the transversal and inside the lines.

Altitude- a line segment from a vertex of a triangle that is perpendicular to the line containing the opposite side.

Angle- a shape formed by two rays or lines starting at a common point (the vertex).

Angle Bisector- a ray that bisects an angle, dividing it into two equal parts.

Base Angle- either of the congruent angles of an isosceles triangle.

Centroid- the three medians' points of concurrency in a triangle.

Circumcenter- point of concurrency of the perpendicular bisectors of a triangle.

Complementary Angles- two angles that add to 90^o.

Concurrent Lines- three or more lines that intersect at the same point.

Concurrent Rays- three or more rays that intersect at the same point.

Concurrent Segments- three or more line segments that intersect at the same point.

Consecutive Interior Angles- angles on the same side of the transversal and between the lines.

Corresponding Angles- angles formed by a transversal and located at the same position relative to the transversal.

Corresponding Sides- congruent sides of congruent figures.

Equilateral Triangle-a triangle with three congruent sides and three congruent angles.

Hypotenuse- the side opposite the right angle in a right triangle.

Incenter- point of concurrency of an angle bisectors of a triangle.

Isosceles Triangle: A triangle with two sides of the same length

Leg: Either of the two sides of a right triangle that are not the hypotenuse.

Linear Pair: Two adjacent angles that add to 180^o. The rays of linear pairs form a line. Also called linear angles.

Median: A line segment from a triangle's vertex to the midpoint of the opposite side.

Oblique Triangle: A triangle that has no right angle.

Obtuse Angle: An angle greater than 90^o, but less than 180^o.

Obtuse Triangle: A triangle with an angle greater than 90^o.

Orthocenter: The point where the three altitudes of a triangle meet. The orthocenter can be inside, on, or outside the triangle.

Point of Concurrency: The point where three or more segments, rays, or lines intersect.

Pythagorean Theorem: In a right triangle, the square of the length of the hypotenuse is equal to the sum of the squares of the lengths of the legs: $a^2 + b^2 = c^2$

Pythagorean Triple: A set of three integers that satisfies the Pythagorean Theorem.

Right Angle: A 90^o angle.

Right Triangle: A triangle with one right angle.

Scalene Triangle: A triangle with no congruent sides and no congruent angles.

Straight Angle: An angle of 180^o.

Supplementary Angles: Two angles that add to 180^o.

Transversal: A line that intersects two other lines

Triangle: A polygon formed by three line segments.

Triangular Prism: A prism with bases that are triangles.

Vertex: In a two-dimensional figure, a point where two sides meet. In a three-dimensional figure, a point where three or more edges meet.

Vertex Angle: An angle opposite the base of an isosceles triangle.

Vertical Angles: A pair of angles, opposite from one another, formed by two intersecting lines.