## Geometry Conjectures

Perpendicular Bisector Conjecture - If a point is on the perpendicular bisector of a segment, then it is equal distance from the end points.

Converse of the Perpendicular Bisector Conjecture - If a point is equal distance from the endpoints of a segment, then it is on the perpendicular bisector of a segment.

Angle Bisector Conjecture - If a point is on the bisector of an angle, then it is equal distance from the sides of the angle.

Linear Pair Conjecture - If two angles form a linear pair, then the measures of the angles add up to $180^{\circ}$.

Vertical Angles Conjecture - If two angles are vertical angles, then they are congruent and have equal measures.

Corresponding Angles Conjecture - If two parallel lines are cut by a transversal, then corresponding angles are congruent.

Alternate Interior Angles Conjecture - If two parallel lines are cut by a transversal, then alternate interior angles are congruent.

Alternate Exterior Angles Conjecture - If two parallel lines are cut by a transversal. Then alternate exterior angles are congruent.

Parallel Lines Conjecture - If two parallel lines are cut by a transversal, then corresponding angles are congruent, alternate interior angles are congruent, and alternate exterior angles are congruent.

Converse of the Parallel Lines Conjecture - If two lines are cut by a transversal to form pairs of congruent corresponding angles, congruent alternate interior angles, or congruent alternate exterior angles, then the lines are parallel.

