

Definitions to Memorize (You must write out the definition in words in a proof.) Also, for # 1 – 9, write the **converse** for each definition, and memorize these statements, as well.

1. Congruent Segments: If two segments are congruent then they have the same length.

Converse: If two segments have the same length, then they are congruent.

2. Congruent Angles: If two angles are congruent, then they have the same degree measure.

Converse: If two angles have the same degree measure, then they are congruent.

3. Angle Bisector: If a ray bisects an angle, then it divides the angle into two congruent angles.

Converse: If a ray divides an angle into two congruent angles, then it bisects that angle.

4. Complementary Angles: If two angles are complementary angles, then the sum of their measures is 90° .

Converse: If two angles measures have a sum of 90° , then they are complementary angles.

5. Supplementary Angles: If two angles are supplementary angles, then the sum of their measures is 180° .

Converse: If two angles measures have a sum of 180° , then they are supplementary angles.

6. Perpendicular Lines: If two lines, segments, or rays are perpendicular, then they intersect to create 4 right angles.

Converse: If two lines, segments, or rays intersect to create 4 right angles, then they are perpendicular lines.

7. Right Angles: If an angle is a right angle, then it has a measure of 90° .

Converse: If an angle has a measure of 90° , then it is a right angle.

8. Midpoint: If a point is a midpoint, then it is between the endpoints and equidistant from the endpoints of a segment.

Converse: If a point is between the endpoints and equidistant from the endpoints of a segment, then it is a midpoint.

9. Segment Bisector: If a point, line, or ray bisects a segment, then it divides the segment into two congruent segments.

Converse: If a point, line, or ray divides a segment into two congruent segments, then it bisects the segment.

10. Betweenness of Points: Point M is between points P and Q if and only if P, Q, M are collinear and $PM + MQ = PQ$