

**Postulates:** (You must write out the postulate in words, except for the last two postulates, in bold.)

1. Through any two points there is exactly one line.
2. Through any three noncollinear points, there is exactly one plane.
3. A line contains at least 2 points.
4. A plane contains at least 3 noncollinear points.
5. If two points lie in a plane, then the entire line containing those points lies in the plane.
6. If 2 lines intersect, then their intersection is exactly one point.
7. If 2 plane intersect, then their intersection is a line.
8. **Segment Addition Postulate:** If A, B, and C are collinear and B is between A and C, then  $AB + BC = AC$ .
9. **Angle Addition Postulate:** If D is in the interior of  $\angle ABC$ , then  $m\angle ABD + m\angle DBC = m\angle ABC$ .

**Properties:** (You may use the name of the property.)

1. Addition Property of Equality
2. Subtraction Property of Equality
3. Multiplication Property of Equality
4. Division Property of Equality
5. Reflexive Property of Equality
6. Symmetric Property of Equality
7. Transitive Property of Equality
8. Substitution Property of Equality
9. Distributive Property of Equality
10. Reflexive Property of Congruence:
11. Symmetric Property of Congruence:
12. Transitive Property of Congruence:

**Theorems:** (You must write out the theorem in words or symbols.)

1. If a point is a midpoint, then it divides a segment into two congruent segments.
2. If two angles form a linear pair, then they are supplementary angles.
3. If two adjacent angles form a right angle, then they are complementary angles.
4. If angles are supplementary to the same angle (or to congruent angles), then they are congruent.
5. If angles are complementary to the same angle (or to congruent angles), then they are congruent.
6. If two angles are vertical, then they are congruent.
7. If two lines are perpendicular, then they form four right angles.
8. If two angles are right angles, then they are congruent.
9. If two lines are perpendicular, then they form congruent adjacent angles.
10. If two congruent angles form a linear pair, then they are right angles.

**Special Statements in Proofs:**

1. If you want to use vertical angles, you must FIRST state that  $\angle A$  is vertical to  $\angle B$  (diagram).
2. If you want to use a linear pair, you must FIRST state that  $\angle A$  and  $\angle B$  form a linear pair (diagram).