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| **Given/Shown** | **Statement** | **Reason** |
| Intersecting Lines (shown) | Angle = Other angle | Vertical angles are congruent |
| Overlapping triangles (shown) | Same Angle = Same Angle  OR  Same Side = Same Side | Reflexive Property |
| Shared side triangles (shown) | Same Side = Same Side | Reflexive Property |
| Midpoint  (given not assumed) | Segment part = segment part | Definition of a midpoint |
| Segment bisector (given not assumed) | Segment part = segment part | Definition of a segment bisector |
| Angle bisector (given not assumed) | Angle part = angle part | Definition of an angle bisector |
| 2 congruent sides in a triangle (given not assumed)  OR  2 congruent angles in a triangle (given not assumed) | *Always make 2 statements*   1. Triangle \_\_\_ is isosceles 2. Angle = Angle OR   Side = Side | *Reason for each statement*   1. If a triangle has 2 congruent \_\_\_\_\_ it is isosceles 2. In an isosceles triangle, 2 sides/angles are congruent |
| Parallel Lines | Angle = angle  OR  Quadrilateral is a parallelogram | When parallel lines are cut by a transversal…   * Alternate interior angles are congruent * Corresponding angles are congruent   OR  A quadrilateral is a parallelogram if opposite sides are parallel |
| Perpendicular Lines | *Always make 2 statements:*   1. Angle = 90   Angle = 90   1. Angle = Angle | *Reason for each statement*   1. Perpendicular Lines form 90 degree angles 2. All right angles are congruent |
| Parallelogram | 4 potential statements   * Side || side * Opposite Side = Opposite Side * Opposite Angle = opposite angle * Diagonal part = diagonal part | In a parallelogram…   1. Opposite sides are parallel 2. Opposite sides congruent 3. Opposite angles congruent 4. Diagonals bisect each other |
| Rhombus | 2 potential statements   * Side = side = side = side * Angle = 90 THEN Triangle \_\_\_\_ is a right triangle | In a rhombus…   * All 4 sides are congruent * Diagonals are perpendicular |
| Rectangle | 3 potential statements   * Opposite Side = Opposite Side * Angle = 90 * Diagonal = diagonal | In a rectangle…   * Opposite sides are congruent * All angles are 90 degrees * Diagonals are congruent |
| Circle | * Diameter = radius/2 * Radius = radius * Angle = angle * Angle = 90 | * A radius is half of a diameter * All radii are congruent * Angles that intercept the same arc are congruent * Tangent lines are perpendicular to the radius OR  Chord is perpendicular to the diameter |

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| **If you need to prove…** | **Last reason should be…** |
| Prove: Triangle congruent to triangle | AAS, ASA, SAS, SSS, HL (if right triangle) |
| Prove: Triangle similar to triangle | AA~, SAS~, SSS~ |
| Prove: Side = side OR angle = angle | CPCTC |