Name_____Per._____Date_____
Geometry Conjecture Worksheet

Determine the Truth-Value of the following conjectures. If it is False provide a counter-example.

1. **Given:** $m\angle 1 = 20°$ and $m\angle 2 = 70°$

   Conjecture: $\angle 1$ and $\angle 2$ are comp. $\angle$'s.

2. If points A,B, and C are collinear, then pt. B is between pts. A and C.

3. **Given:** $\angle 1$ and $\angle 2$ are sup. $\angle$'s

   Conjecture: $\angle 1 \cong \angle 2$

4. If a quadrilateral has four $\cong$ sides, then it is a square.

5. If line m is $\perp$ to line n then four right angles are formed.

6. **Given:** $\angle A$ is an obtuse angle

   Conjecture: $m\angle A = 120°$

7. If $\overline{AB} \cong \overline{CD}$ and $\overline{CD} \cong \overline{EF}$ then $\overline{AB} \cong \overline{EF}$

8. If a polyhedron is a prism, then its bases are triangles.

9. **Given:** M is the midpoint of $\overline{AB}$

   Conjecture: $\overline{AM} \cong \overline{MB}$

10. If two angles are comp. then a ray bisects a right angle.