

Name: _____

Answer each question.

1. Two lines intersect, and one of the angles formed measures 71° . Find the measures of the other three angles.
2. $\angle A$ and $\angle B$ are each supplementary to $\angle C$. What can you conclude, and by which theorem?
3. $\angle C$ and $\angle D$ are complementary to congruent angles. What can you conclude?

Use the diagram for Exercise 4.

4. Find the value of w .

Solve each problem.

5. Two angles measuring $(6y + 20)^\circ$ and $(4y)^\circ$ form a linear pair. Find the value of y and both measures.
6. True or false: all right angles are congruent. Name the theorem.

Complete the proof.

7. Given: $\angle 1 \cong \angle 2$ and $\angle 2 \cong \angle 3$. Prove: $\angle 1 \cong \angle 3$.

Statements	Reasons
1. $\angle 1 \cong \angle 2$; $\angle 2 \cong \angle 3$	1. Given
2.	2.

