Geometry HW #____ Name_____

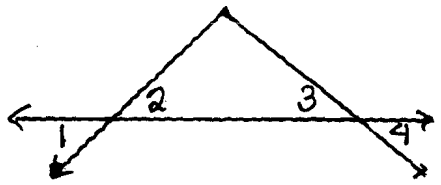
2.4, 2.5

Period____ Column_____

Complete each proof.

1. Given: $\angle 2 \cong \angle 3$

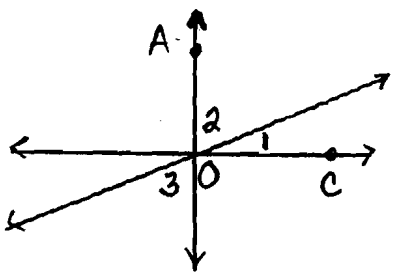
   Prove: $\angle 1 \cong \angle 4$



	STATEMENTS	REASONS
1.	$\angle 1 \cong \angle 2$	1.
2.	$\angle 2 \cong \angle 3$	2.
3.	$\angle 1 \cong \angle 3$	3.
4.	$\angle 3 \cong \angle 4$	4.
5.	$\angle 1 \cong \angle 4$	5.

2. Given: $\overleftrightarrow{AO} \perp \overleftrightarrow{CO}$

   Prove: $\angle 1$ and $\angle 3$ are complementary $\angle$s



	STATEMENTS	REASONS
1.	$\overleftrightarrow{AO} \perp \overleftrightarrow{CO}$	1.
2.	$\angle AOC$ is a right angle	2.
3.	$m\angle AOC = 90$	3.
4.	$m\angle AOC = m\angle 1 + m\angle 2$	4.
5.	$m\angle 1 + m\angle 2 = 90$	5.
6.	$m\angle 2 = m\angle 3$	6.
7.	$m\angle 1 + m\angle 3 = 90$	7.
8.		8.