

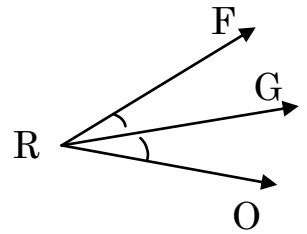
Geometry
2.6 Day 3 Homework

Name: Key

Directions: Please complete each two column proof below. Make sure you begin with the "given" statements and end with the "prove" statement.

1. Given: \overrightarrow{GR} bisects $\angle FRO$

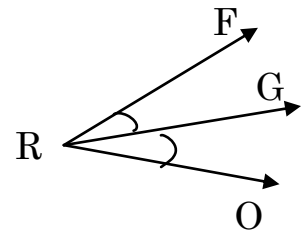
Prove: $\angle FRG \cong \angle GRO$



Statements	Reasons
1) \overrightarrow{GR} bisects $\angle FRO$	1) Given
2) $\angle FRG \cong \angle GRO$	2) If a ray bisects an \angle , then it divides an \angle into 2 \cong \angle 's.

2. Given: $\angle FRG \cong \angle GRO$

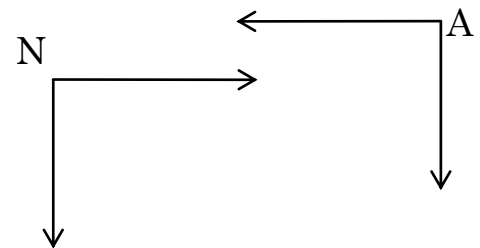
Prove: \overrightarrow{GR} bisects $\angle FRO$



Statements	Reasons
1) $\angle FRG \cong \angle GRO$	1) Given
2) \overrightarrow{GR} bisects $\angle FRO$	2) If an \angle is divided into 2 \cong \angle 's by a ray, then that ray bisects the \angle .

3. Given: $\angle N$ is a right angle
 $\angle A$ is a right angle

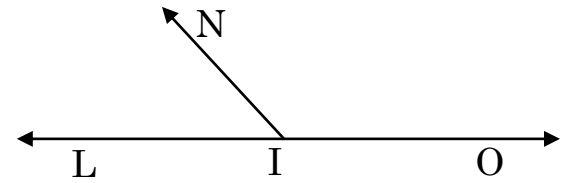
Prove: $\angle N \cong \angle A$



Statements	Reasons
1) $\angle N$ is a rt \angle	1) Given
2) $\angle A$ is a rt \angle	2) Given
3) $\angle N \cong \angle A$	3) If 2 \angle 's are rt \angle 's then they are \cong (OR All right \angle 's are \cong)

4. Given: $\angle LIN$ and $\angle NIO$ form a linear pair.

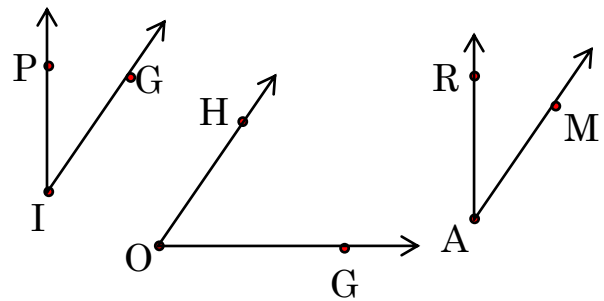
Prove: $\angle LIN$ and $\angle NIO$ are supplementary



Statements	Reasons
1) $\angle LIN$ & $\angle NIO$ form a linear pair	1) Given
2) $\angle LIN$ & $\angle NIO$ are supp	2) If 2 \angle 's form a linear pair then they are supp.

5. Given: $\angle PIG$ is complementary to $\angle HOG$
 $\angle RAM$ is complementary to $\angle HOG$

Prove: $\angle PIG \cong \angle RAM$



Statements	Reasons
1) $\angle PIG$ is comp to $\angle HOG$	1) Given
2) $\angle RAM$ is comp to $\angle HOG$	2) Given
3) $\angle PIG \cong \angle RAM$	3) If 2 \angle 's are comp to the same \angle then they are \cong .