

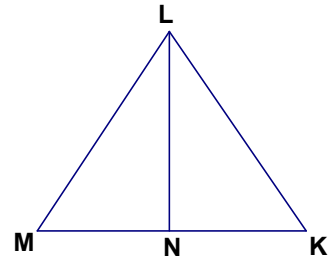
Name _____
Mr. Schlansky

Date _____
Geometry

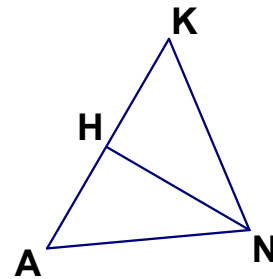


Triangle Proofs Using CPCTC

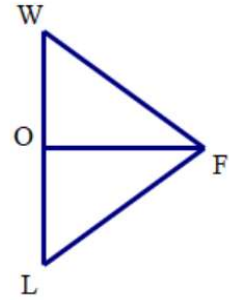
1. Given: \overline{LN} bisects $\angle KLM$
 $\angle LKM \cong \angle LMK$
Prove: N is the midpoint of \overline{MK}



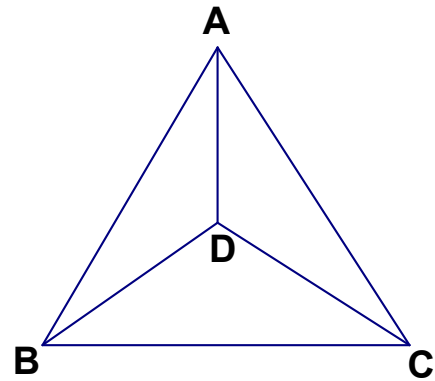
2. Given: $\overline{HN} \perp \overline{KA}$, $\overline{KN} \cong \overline{AN}$
Prove: \overline{HN} bisects $\angle KNA$



3. Given: \overline{OF} is the perpendicular bisector of \overline{WL}
Prove: $\triangle WFL$ is isosceles

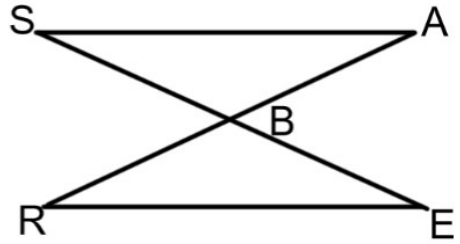


4. Given: $\angle ADB \cong \angle ADC$
 \overline{AD} bisects $\angle BAC$
Prove: $\triangle ABC$ is isosceles



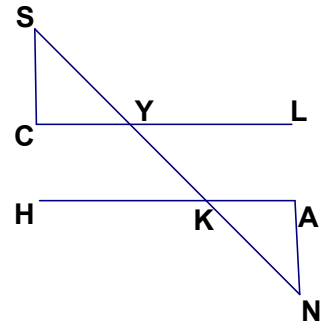
5. Given: \overline{SE} and \overline{AR} bisect each other.

Prove that $\overline{SA} \parallel \overline{RE}$

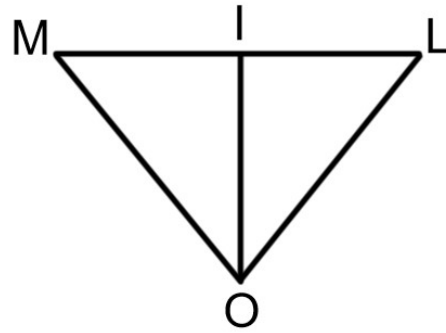


6. Given: $\overline{SC} \perp \overline{CL}$, $\overline{HA} \perp \overline{AN}$, $\overline{SY} \cong \overline{KN}$, and $\overline{SC} \cong \overline{AN}$.

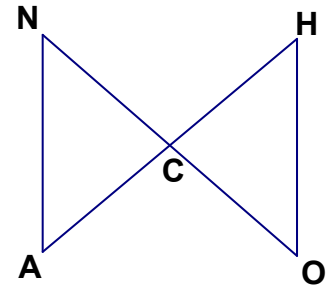
Prove $\overline{CL} \parallel \overline{HA}$



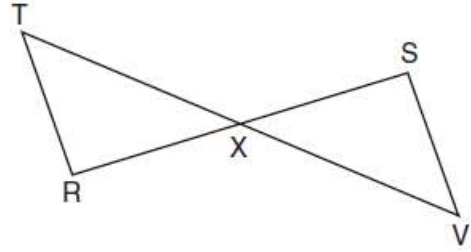
7. Given: \overline{OI} is the perpendicular bisector of \overline{ML}
Prove: $\triangle MLO$ is isosceles



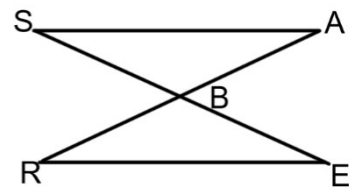
8. Given: $\overline{NA} \parallel \overline{HO}$, $\overline{NA} \cong \overline{HO}$
Prove: \overline{NO} bisects \overline{HA}



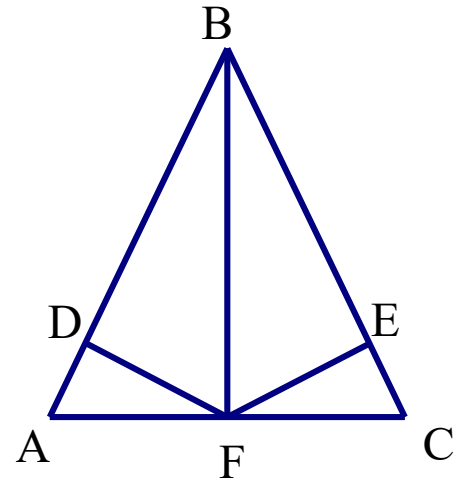
9. Given: \overline{RS} and \overline{TV} bisect each other at point X
 \overline{TR} and \overline{SV} are drawn
 Prove: $\overline{TR} \parallel \overline{SV}$



10. Given: \overline{SE} and \overline{RA} bisect each other
 Prove: $\overline{SA} \parallel \overline{RE}$.



11. Given: $\overline{FD} \perp \overline{BA}$, $\overline{FE} \perp \overline{BC}$, F is the midpoint of \overline{AC} ,
 $\angle DFA \cong \angle EFC$
Prove: $\triangle ABC$ is isosceles



12. Given: \overline{BR} is the perpendicular bisector of \overline{IO}
Prove: \overline{NB} bisects $\angle OBI$

