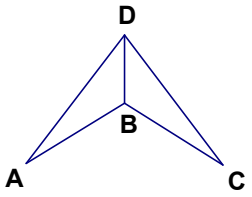
Name _____ Date _____

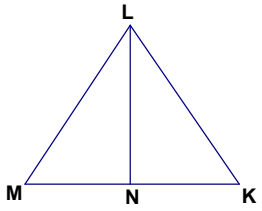
Mr. Schlansky Geometry

Triangle Proofs with CPCTC

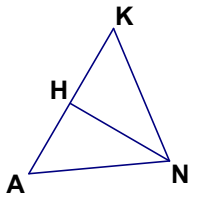
1. Given: $\overline{BD}$ bisects $\angle ADC$
   $\overline{AD} \cong \overline{DC}$
   Prove: $\overline{AB} \cong \overline{BC}$



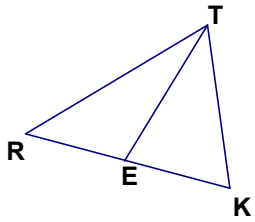
2. Given: $\overline{LN}$ bisects $\angle KLM$
   $\angle LKM \cong \angle LMK$
   Prove: $\overline{NM} \cong \overline{NK}$



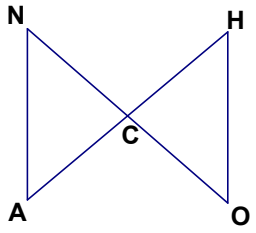
3. Given: $\overline{HN} \perp \overline{KA}$, $\overline{KN} \cong \overline{AN}$
Prove: $\angle HAN \cong \angle HKN$



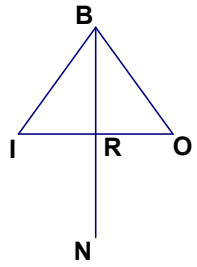
4. Given: $\overline{TE}$ is a median, $\overline{TR} \cong \overline{TK}$
Prove: $\angle$ TKR $\cong$ $\angle$ TRK



5. Given: $\overline{NO}$ and $\overline{HA}$ bisect each other
Prove: $\overline{NA} \cong \overline{HO}$

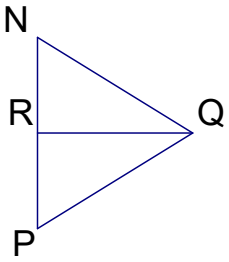


6. Given: $\overline{NB}$ bisects $\angle$IBO, $\overline{BR}$ is an altitude
Prove: $\angle$BIO $\cong$ $\angle$BOI



7. Given: $\overline{QR}$ is the perpendicular bisector of $\overline{NP}$

Prove: $\angle NQR \cong \angle PQR$



8. Given: $\overline{IE} \parallel \overline{RN}$, $\overline{TR} \perp \overline{RN}$, $\overline{HS} \perp \overline{IE}$, $\overline{EH} \cong \overline{AT}$

Prove: $\overline{SH} \cong \overline{RT}$