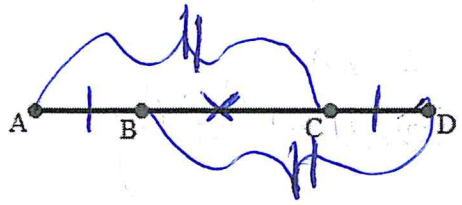
Name Schlansky
Mr. Schlansky

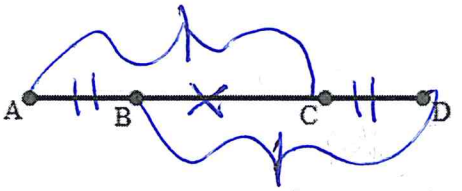
Date _____
Geometry

Addition and Subtraction Property Mini Proofs



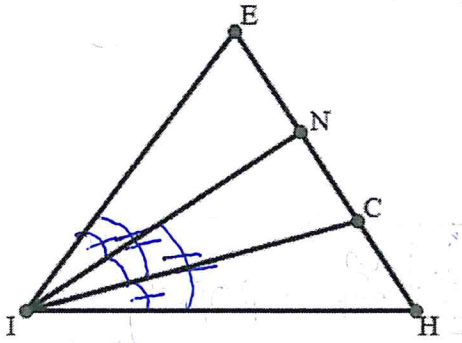
1. Given: $\overline{AB} \cong \overline{CD}$
   Prove: $\overline{AC} \cong \overline{BD}$

Statements	Reasons
① $\overline{AB} \cong \overline{CD}$	① given
② $\overline{BC} \cong \overline{BC}$	② reflexive property
③ $\overline{AC} \cong \overline{BD}$	③ Addition Property



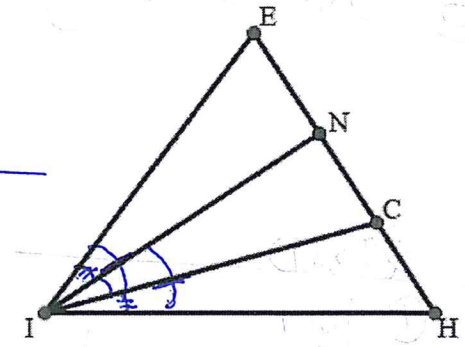
2. Given: $\overline{AC} \cong \overline{BD}$
   Prove: $\overline{AB} \cong \overline{CD}$

Statements	Reasons
① $\overline{AC} \cong \overline{BD}$	① given
② $\overline{BC} \cong \overline{BC}$	② reflexive property
③ $\overline{AB} \cong \overline{CD}$	③ Subtraction property



3. Given: $\angle EIN \cong \angle HIC$
   Prove: $\angle EIC \cong \angle HIN$

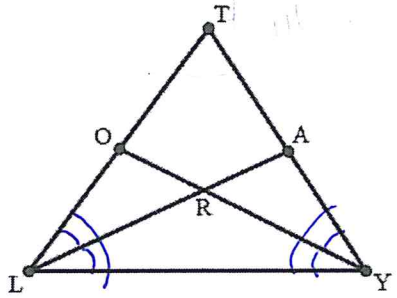
Statements	Reasons
① $\angle EIN \cong \angle HIC$	① given
② $\angle NIC \cong \angle NIC$	② reflexive property
③ $\angle EIC \cong \angle HIN$	③ Addition Property



4. Given: $\angle EIC \cong \angle HIN$
   Prove: $\angle EIN \cong \angle HIC$

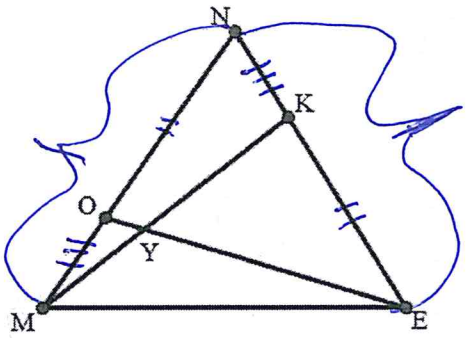
Statements	Reasons
① $\angle EIC \cong \angle HIN$	① given
② $\angle NIC \cong \angle NIC$	② reflexive property
③ $\angle EIN \cong \angle HIC$	③ subtraction property

5. Given: $\angle TLA \cong \angle TYO$, $\angle ALY \cong \angle OYL$
Prove: $\angle TLY \cong \angle TYL$



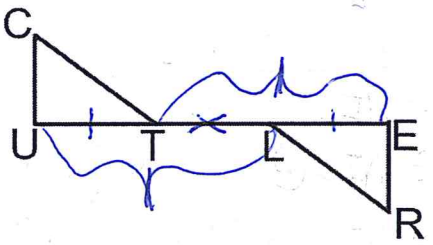
Statements	Reasons
① $\angle TLA \cong \angle TYO$	① given
② $\angle ALY \cong \angle OYL$	② given
③ $\angle TLY \cong \angle TYL$	③ Addition Property

6. Given: $\overline{MN} \cong \overline{NE}$, $\overline{ON} \cong \overline{KE}$
Prove: $\overline{MO} \cong \overline{KN}$



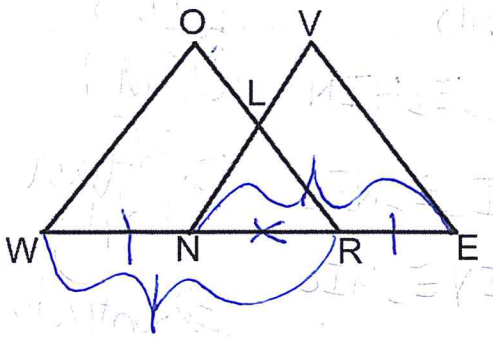
statements	Reasons
① $\overline{MN} \cong \overline{NE}$	① given
② $\overline{ON} \cong \overline{KE}$	② given
③ $\overline{MO} \cong \overline{KN}$	③ subtraction property

7. Given: $\overline{UL} \cong \overline{TE}$
Prove: $\overline{UT} \cong \overline{LE}$



statements	Reasons
① $\overline{UL} \cong \overline{TE}$	① given
② $\overline{TL} \cong \overline{TL}$	② reflexive property
③ $\overline{UT} \cong \overline{LE}$	③ subtraction property

8. Given: $\overline{WN} \cong \overline{RE}$
Prove: $\overline{WR} \cong \overline{NE}$



statements	Reasons
① $\overline{WN} \cong \overline{RE}$	① given
② $\overline{NR} \cong \overline{NR}$	② reflexive property
③ $\overline{WR} \cong \overline{NE}$	③ addition property