

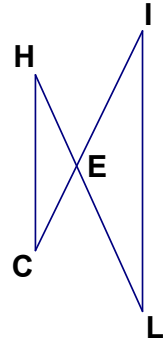
Name _____
Mr. Schlansky

Date _____
Geometry

Proving Proportions and Multiplication

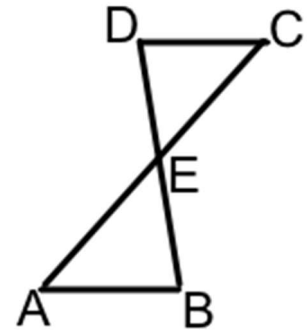
1. Given: $\angle HCE \cong \angle LIE$

Prove: $\overline{CE} \bullet \overline{IL} = \overline{CH} \bullet \overline{EI}$



2. Given $\overline{AB} \parallel \overline{DC}$

Prove: $\overline{DC} \bullet \overline{EB} = \overline{AB} \bullet \overline{DE}$



3. Given: $\overline{BC} \perp \overline{AC}$

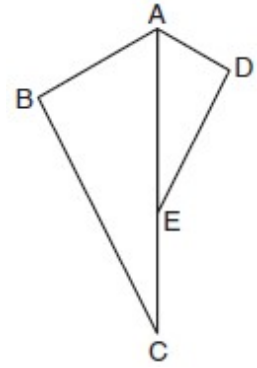
$\overline{DE} \perp \overline{AB}$

Prove: $\overline{AC} \bullet \overline{AD} = \overline{AE} \bullet \overline{AB}$



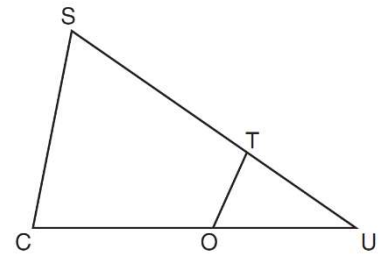
4. Given: $\overline{CA}$ bisects $\angle BAD$, $\angle ABC \cong \angle ADE$

Prove: $\overline{BC} \bullet \overline{AE} = \overline{DE} \bullet \overline{AC}$



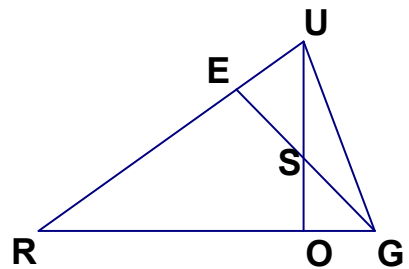
5. Given: $\angle C \cong \angle OTU$.

Prove: $\overline{SC} \bullet \overline{OU} = \overline{OT} \bullet \overline{SU}$



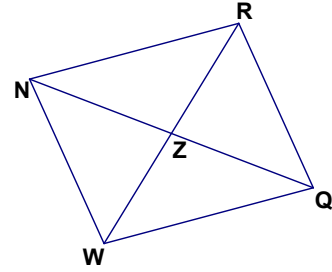
6. Given: $\overline{UO} \perp \overline{RG}$, $\overline{UR} \perp \overline{EG}$

Prove: $\frac{\overline{US}}{\overline{SO}} = \frac{\overline{EU}}{\overline{OG}}$



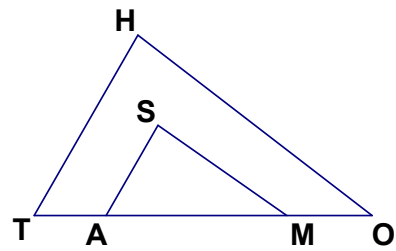
7. Given: $\overline{NQ} \perp \overline{RW}$, $\overline{NQ}$ bisects $\angle RQW$

Prove: $\overline{RZ} \bullet \overline{QW} = \overline{RQ} \bullet \overline{ZW}$



8. Given: $\overline{TH} \parallel \overline{AS}$, $\overline{SM} \parallel \overline{HO}$

Prove: $\overline{TH} \bullet \overline{SM} = \overline{AS} \bullet \overline{HO}$



9. Given: $\overline{AB} \cong \overline{AC}$, $\overline{AF} \perp \overline{BC}$, $\overline{PD} \perp \overline{AB}$

Prove: $\overline{FC} \bullet \overline{PB} = \overline{DB} \bullet \overline{AC}$

