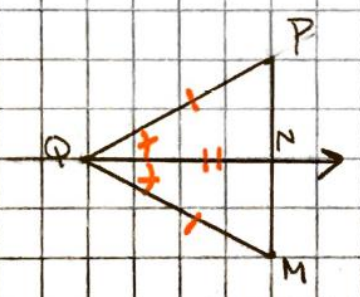


Geometry HW #3

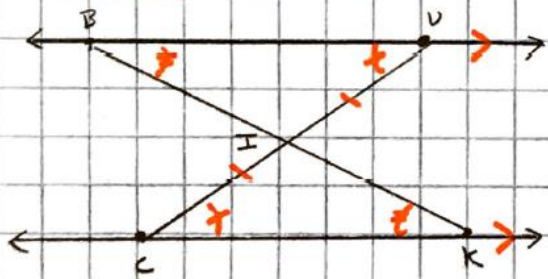
These problems were done in class:

3 Given: \overrightarrow{QN} bisects $\angle MQP$
 $\overline{MQ} \cong \overline{PQ}$
 Prove: $\triangle MQN \cong \triangle PQN$



Statements	Reasons
1. \overrightarrow{QN} bisects $\angle MQP$	Given
2. $\angle PQN \cong \angle MQN$	Defn of Bisector
3. $\overline{MQ} \cong \overline{PQ}$	Given
4. $\overline{QN} \cong \overline{QN}$	Reflexive Prop \cong
5. $\triangle MQN \cong \triangle PQN$	SAS

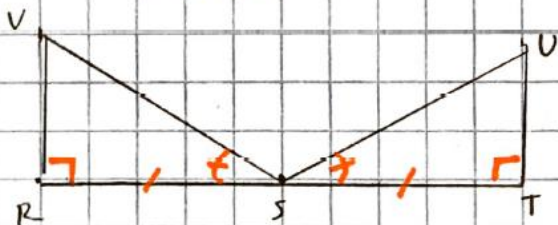
7 Given: $\overleftrightarrow{BV} \parallel \overleftrightarrow{CK}$
 $\overline{CI} \cong \overline{IU}$
 Prove: $\triangle RTS \cong \triangle RUS$



Statements	Reasons
1. $\overleftrightarrow{BV} \parallel \overleftrightarrow{CK}$	Given
2. $\angle BUI \cong \angle UCK$	Alt Int \angle 's \cong
3. $\angle UBI \cong \angle CKI$	Alt Int \angle 's \cong
4. $\overline{CI} \cong \overline{IU}$	Given
5. $\triangle RTS \cong \triangle RUS$	AAS

Here's #4 in case you get stuck....

4 Given: S is the midpoint of \overline{RT}
 $\angle R$ and $\angle T$ are rt \angle 's
 $\angle VSR \cong \angle UST$
 Prove: $\triangle SRV \cong \triangle STU$



Statements	Reasons
1. S midpoint \overline{RT}	Given
2. $\overline{RS} \cong \overline{ST}$	Defn of Midpoint
3. $\angle R, \angle T$ rt \angle 's	Given
4. $\angle R \cong \angle T$	all rt \angle 's \cong
5. $\angle VSR \cong \angle UST$	Given
6. $\triangle SRV \cong \triangle STU$	ASA