

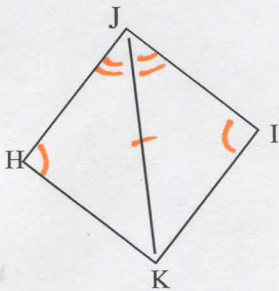
5.7 Proving Congruent Triangle PROOFS CYU DAY ONE

Use when you get it right all by yourself
S Use when you did it all by yourself, but made a silly mistake
H Use when you could do it alone with a little help from teacher or peer
G Use when you completed the problem in a group
X Use when a question was attempted but wrong (get help)
N Use when a question was not even attempted

CONCEPTS	BASIC	INTERMEDIATE	ADVANCED
Reflexive POC	1 - 3		
Def of Angle Bisector		1, 2	
SAS, SSS, AAS, HL, ASA	1 - 5		
Alternate Interior Angles		4 - 5	

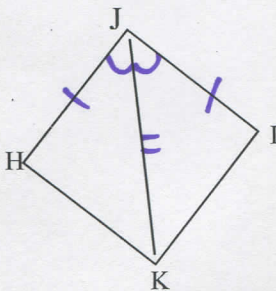
Be sure to number and label all your statements and reasons. BE sure to mark stuff AFTER you write it in your proof!

1. Given: $\angle H \cong \angle I$; \overline{JK} bisects $\angle HJI$
 Prove: $\triangle HJK \cong \triangle IJK$



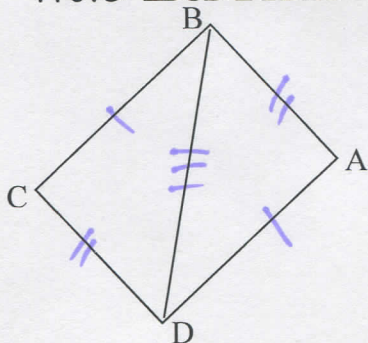
statements	reasons
1. $\angle H \cong \angle I$; \overline{JK} bisects $\angle HJI$	1. given
2. $\angle HJK \cong \angle IJK$	2. Def of \angle bisector
3. $\overline{JK} \cong \overline{JK}$	3. Reflexive POC
4. $\triangle HJK \cong \triangle IJK$	4. AAS \cong Thm

2. Given: $\overline{JH} \cong \overline{JI}$; \overline{JK} bisects $\angle HJI$
 Prove: $\triangle HJK \cong \triangle IJK$



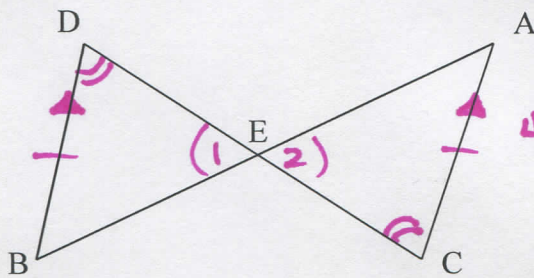
statements	reasons
1. $\overline{JH} \cong \overline{JI}$; \overline{JK} bisects $\angle HJI$	1. Given
2. $\angle HJK \cong \angle IJK$	2. Def of \angle bisector
3. $\overline{JK} \cong \overline{JK}$	3. Reflexive POC
4. $\triangle HJK \cong \triangle IJK$	4. SAS Post.

3. Given: $\overline{BC} \cong \overline{AD}$; $\overline{BA} \cong \overline{CD}$
 Prove: $\triangle BCD \cong \triangle DAB$



statements	reasons
1. $\overline{BC} \cong \overline{AD}$; $\overline{BA} \cong \overline{CD}$	1. Given
2. $\overline{BD} \cong \overline{BD}$	2. Reflexive POC
3. $\triangle BCD \cong \triangle DAB$	3. SSS \cong Thm

4. Given: $\overline{BD} \cong \overline{AC}$; $\overline{BD} \parallel \overline{AC}$
 Prove: $\triangle BED \cong \triangle AEC$



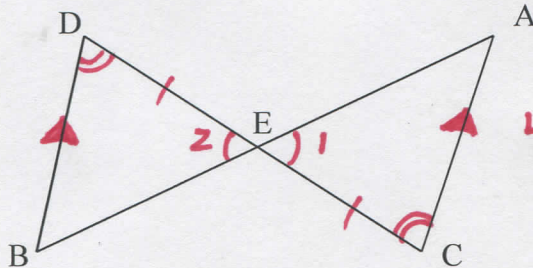
1. $\overline{BD} \cong \overline{AC}$; $\overline{BD} \parallel \overline{AC}$
 2. $\angle 1 \cong \angle 2$
 3. $\angle D \cong \angle C$
 4. $\triangle BED \cong \triangle AEC$

statements

reasons

1. Given
 2. Def of Vertical \angle 's
 3. AIA Thm
 4. AAS \cong Thm

5. Given: $\overline{ED} \cong \overline{EC}$; $\overline{BD} \parallel \overline{AC}$
 Prove: $\triangle BED \cong \triangle AEC$



1. $\overline{ED} \cong \overline{EC}$; $\overline{BD} \parallel \overline{AC}$
 2. $\angle 1 \cong \angle 2$
 3. $\angle D \cong \angle C$
 4. $\triangle BED \cong \triangle AEC$

statements

reasons

1. given
 2. Def of vertical \angle 's
 3. AIA Thm
 4. ASA \cong Thm

CYU Reflection: How far can you go: basic, intermediate, or advanced?

Rate your mastery level!

How confident are you with the skills this CYU covered? Circle the score you would give yourself.

