

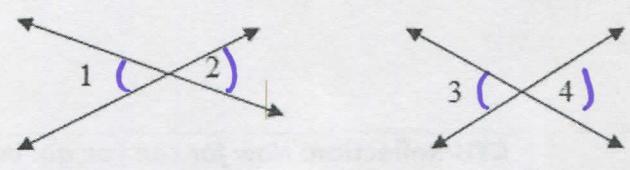
CYU 2.5 & 2.6 Proofs DAY THREE

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
Given	1 - 5		
Transitive POE/POC	5	1, 2	
Symmetric POE/POC		2	
Segment/Angle Addition Postulate		4	
Def. of vertical angles	1, 2		
Substitution POE		4	
Def. of midpoint	5		
Def. of linear pair		3	
If =, then \cong . Or If \cong , then =.	2	4	

Create a two-column proof for the five problems below. Be sure to number your statements and reasons. Leave no holes in your argument. Be a great lawyer! Recreate the proofs on your own piece of paper and staple it to this sheet when you turn it in.

1. Given: $\angle 2 \cong \angle 3$
 Prove: $\angle 1 \cong \angle 4$

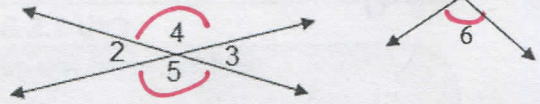


Statements	Reasons
1. $\angle 2 \cong \angle 3$	1. Given
2. $\angle 1 \cong \angle 2; \angle 3 \cong \angle 4$	2. Def. of vertical \angle 's
3. $\angle 1 \cong \angle 4$	3. Transitive POC

2. Given: the figure at the right $\angle 4 \cong \angle 6$

Prove: $\angle 6 \cong \angle 5$

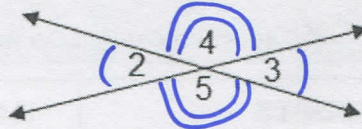
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3. Given: the figure at the right

Prove: $m\angle 2 + m\angle 4 = 180^\circ$

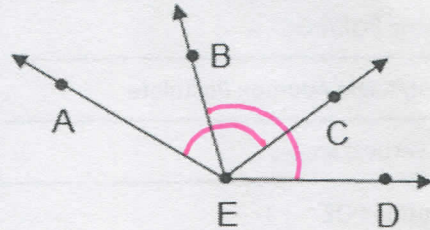
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4. Given: $\angle AEC \cong \angle DEB$

Prove: $\angle AEB \cong \angle DEC$

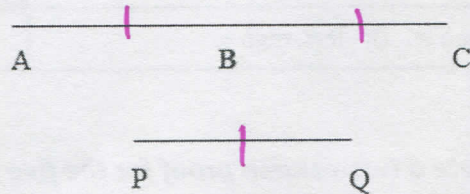
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5. Given: B is midpoint of \overline{AC} , $\overline{BC} \cong \overline{PQ}$

Prove: $\overline{AB} \cong \overline{PQ}$

extra paper



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.

● ● ● ● ● ● ●

1	2	3	4	5	6	7	8
Basic		Intermediate			Advanced		Solved ALL!

➔

2. Statements	Reasons
1. $\angle 4 \cong \angle 6$	1. given
2. $\angle 4 \cong \angle 5$	2. Def of vertical \angle 's
3. $\angle 6 \cong \angle 4$	3. Symmetric POC
4. $\angle 6 \cong \angle 5$	4. Transitive POC

3. Statements	Reasons
1. $\angle 4 \cong \angle 5; \angle 2 \cong \angle 3$	1. Def of vertical \angle 's
2. $\angle 2$ & $\angle 4$ form a linear pair	2. Def of linear pair
3. $m\angle 2 + m\angle 4 = 180^\circ$	3. Def of linear pair

4. Statements	Reasons
1. $\angle AEC \cong \angle DEB$	1. Given
2. $m\angle AEC = m\angle DEB$	2. If $\cong \Rightarrow =$.
3. $m\angle AEB + m\angle BEC = m\angle AEC$ $m\angle BEC + m\angle CED = m\angle DEB$	3. \angle Add. Post.
4. $m\angle AEB + m\angle BEC = m\angle BEC + m\angle CED$ $m\angle CED$	4. Substitution POE
5. $m\angle AEB = m\angle CED$	5. Subtraction POE
6. $\angle AEB \cong \angle CED$	6. If $= \Rightarrow \cong$.

5. Statements	Reasons
1. B is the mdpt of \overline{AC} ; $\overline{BC} \cong \overline{PQ}$	1. Given
2. $\overline{AB} \cong \overline{BC}$	2. Def of mdpt
3. $\overline{AB} \cong \overline{PQ}$	3. Transitive POC