

CYU 2.6 Geometric Reasoning DAY TWO Basic Proofs

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

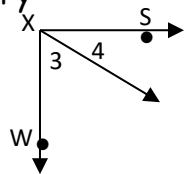
X Use when a question was attempted but wrong (get help)

N Use when a question was not even attempted

CONCEPTS	BASIC	INTERMEDIATE	ADVANCED
Given	1 - 6		
If \cong , then =. Or If =, then \cong .	1, 6		
Transitive POE/POC	1		
Symmetric POE/POC	1		
Segment/Angle Addition Postulate		4, 5	
Def. of Complementary/Supplementary Angles	2, 3	6	
Def. of vertical angles		6	
Def. of Perpendicular Segments/Lines	2		
Substitution POE		4, 5, 6	
Commutative POE		4	
Addition/Subtraction POE/POC		5	

1) Given: $\angle 1 \cong \angle 2$
 $\angle 4 \cong \angle 2$
 Prove: $\angle 1 \cong \angle 4$

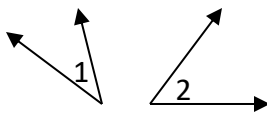
2) Given: $\overline{SX} \perp \overline{WX}$
 Prove: $\angle 3$ & $\angle 4$ are complementary



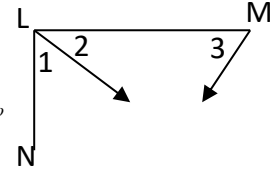
Statements	Reasons

Statements	Reasons

3) Given: $\angle 1$ & $\angle 2$
are complementary.
Prove: $m\angle 1 + m\angle 2 = 90^\circ$



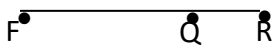
4) Given: $m\angle NLM = 90^\circ$
 $m\angle 1 = m\angle 3$
Prove: $m\angle 2 + m\angle 3 = 90^\circ$



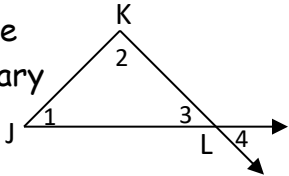
Statements	Reasons

Statements	Reasons

5) Given: Q is between F & R
 $FQ = 12$
 $QR = 8$
Prove: $20 = FR$



6) Given: $m\angle 1 + m\angle 3 = 90^\circ$
Prove: $\angle 1$ & $\angle 4$ are
complementary



Statements	Reasons

Statements	Reasons
1. $m\angle 1 + m\angle 3 = 90^\circ$	1. _____
2. $\angle 3 \cong \angle 4$	2. _____
3. $m\angle 3 = m\angle 4$	3. _____
4. $m\angle 1 + m\angle 4 = 90^\circ$	4. _____
5. $\angle 1$ and $\angle 4$ are complementary	5. _____

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.

