

Define:

1. Complementary Angles: _____

2. Vertical Angles: _____

3. Segment Bisector: _____

Write the definition as a bi-conditional (...if and only if...)

4. Supplementary Angles: _____

Write the theorem and its converse each as a conditional. If the converse is also true, combine both statements into a single bi-conditional (...if and only iff...).

5. Complementary Theorem #1: _____

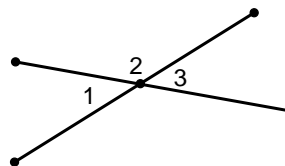
Converse: _____

Bi-Cond: _____

Write the theorem and then use the theorem to make a true conclusion.

6. Supp. Theorem #2: _____

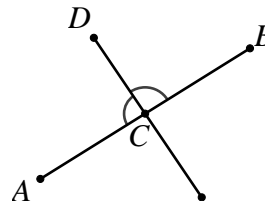
Given: $\angle 1$ is supplementary to $\angle 2$.
 $\angle 3$ is supplementary to $\angle 2$.



Conclusion: _____

7. Supp. Theorem #3: _____

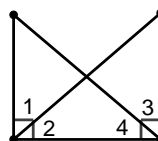
Given: $\angle ACD \cong \angle BCD$
 $\angle ACD$ supplementary to $\angle BCD$



Conclusion: _____

8. Comp. Theorem #1: _____

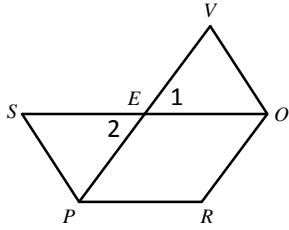
Given: $\angle 1 \cong \angle 3$.
 $\angle 1$ is complementary to $\angle 2$
 $\angle 3$ is complementary to $\angle 4$



Conclusion: _____

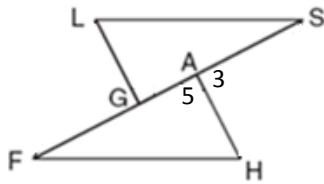
For the given fact(s), write the conclusion(s) and reason(s) in Two-Column format.
 (Do not write the givens in the statement column for these questions.)

9. Given: \overline{PV} intersects \overline{SO} at E.



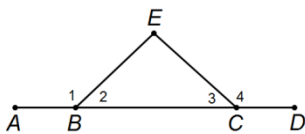
Statements	Reasons
1. _____	
2. _____	

10. Given: \overline{FAS} intersects \overline{AH} at A
 $\angle 3 \cong \angle 5$



Statements	Reasons
1. _____	
2. _____	

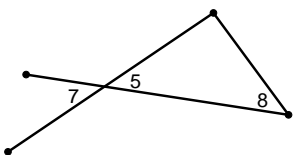
11. Given: \overline{ABCD}
 $\angle 2 \cong \angle 3$



Statements	Reasons
1. _____	

2. _____	

12. Given: $\angle 5$ vertical to $\angle 7$
 $\angle 7 \cong \angle 8$



Statements	Reasons
1. _____	
2. _____	