**Honors Geometry Triangle Review Name:**

1. Give a counterexample (*ie. something that proves the statement false)* for the following statement:

*Any angle that is not acute is an obtuse angle.*

2. Complete the following sentence:

*If two angles are both supplementary to the same angle, then the two angles must be…*

3. Indicate which triangle congruence theorem you would use to show the triangles are congruent, or write NO if you don’t think there is enough information.

  



\_\_\_\_\_\_\_ \_\_\_\_\_\_\_ \_\_\_\_\_\_\_

4. Critique the following statement: *If two triangles are not congruent then none of their corresponding sides or angles are congruent.*

5. Write the word in the blank corresponding to the description. Then give an example for each.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_ always a biconditional *postulate*

\_\_\_\_\_\_\_\_\_\_\_\_\_\_ a restriction assumed to be true *definition*

\_\_\_\_\_\_\_\_\_\_\_\_\_\_ can be proven *theorem*

6. a) Explain the difference between the perpendicular line theorem and the perpendicular line definition.

b) Which theorem below is most often used in conjunction with the supplementary angle theorem?

1) vertical angle theorem 2) linear angle theorem

3) reflexive theorem 4) right angle theorem

c) True or False:

*When using hypotenuse leg you must prove a pair of congruent angles.*

7. Make at least one conclusion about a pair of angles and state the reasons:

a)  b)  and 



8. Given:

,

 *and* 

Prove: 