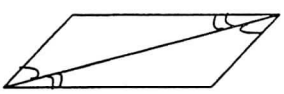
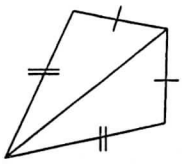
Name _____ GEOMETRY Period _____

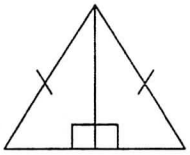
WORKSHEET 5.3 – 5.6 (A)

Decide if SSS, SAS, ASA, AAS, HL, or NONE would prove the triangles congruent based on the way each set of triangles are marked. You must mark the common sides or vertical angles as needed.

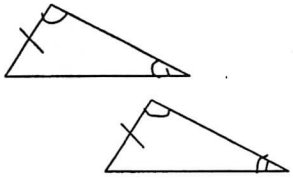
_____ 1.
_____ 2.
_____ 3.

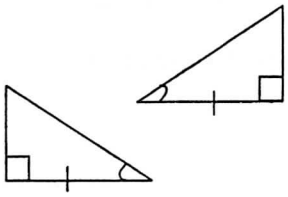
1. 

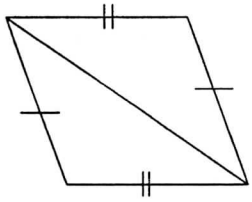
2. 

3. 

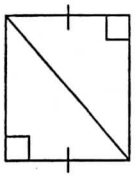
_____ 4.
_____ 5.
_____ 6.

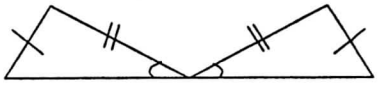
4. 

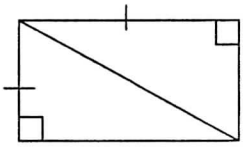
5. 

6. 

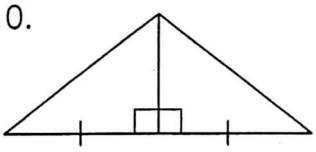
_____ 7.
_____ 8.
_____ 9.

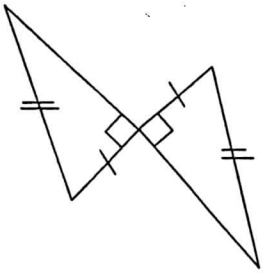
7. 

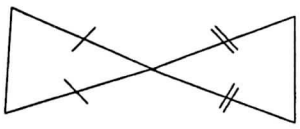
8. 

9. 

_____ 10.
_____ 11.
_____ 12.

10. 

11. 

12. 

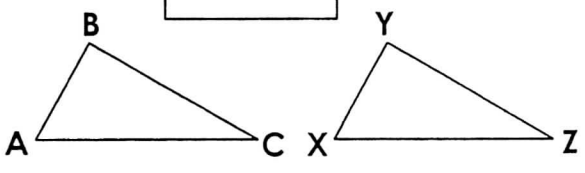
What set of congruent sides or angles do you need to prove the triangles congruent by the indicated method?

_____ 13. $\overline{AB} \cong \overline{XY}$; $\overline{BC} \cong \overline{YZ}$ by SSS

_____ 14. $< A \cong < X$; $\overline{AB} \cong \overline{XY}$ by SAS

_____ 15. $\overline{AC} \cong \overline{XZ}$; $< A \cong < X$ by ASA

#13 - 15

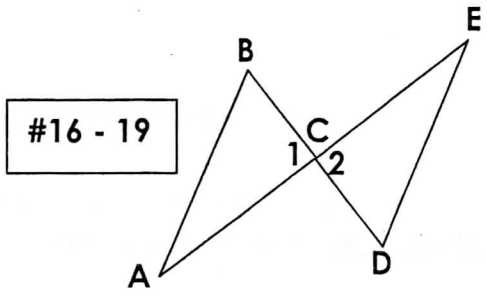


_____ 16. $< B \cong < D$; $\overline{BC} \cong \overline{DC}$ by AAS

_____ 17. $< B \cong < D$; $\overline{AB} \cong \overline{ED}$ by ASA

_____ 18. $\overline{AC} \cong \overline{EC}$; $\overline{BC} \cong \overline{DC}$ by SAS

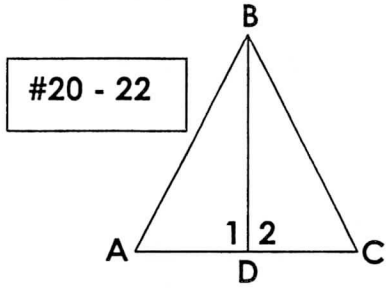
_____ 19. $< 1 \cong < 2$; $\overline{AC} \cong \overline{EC}$ by AAS



_____ 20. $\overline{AB} \cong \overline{CB}$; $\overline{AD} \cong \overline{CD}$ by SSS

_____ 21. $\overline{AD} \cong \overline{CD}$; $\overline{BD} \cong \overline{BD}$ by SAS

_____ 22. $< A \cong < C$; $< 1 \cong <2$ by ASA



_____ 23. $\overline{OE} \cong \overline{NA}$ by HL