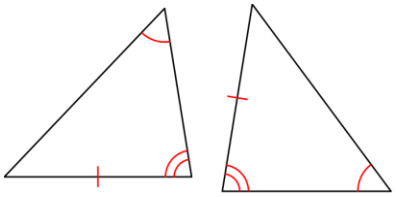
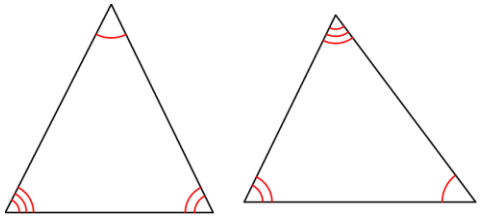
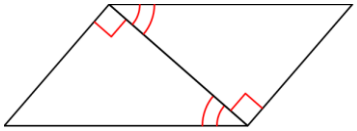
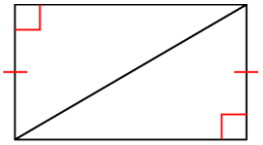
Name _____ **Hour** _____

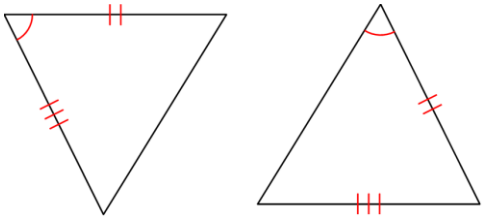
Is it possible to prove that the triangles are congruent? If so, state which congruence postulate or theorem you would use.

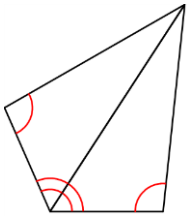
1. 

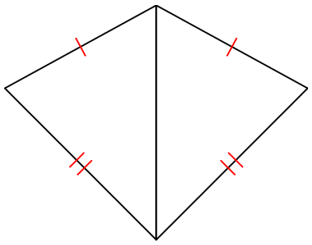
2. 

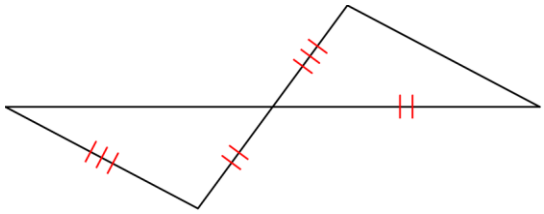
3. 

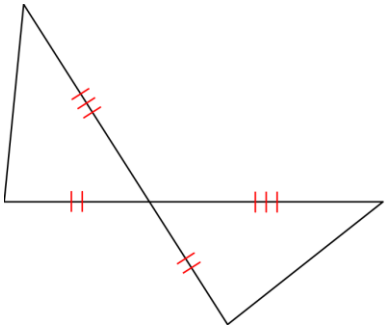
4. 

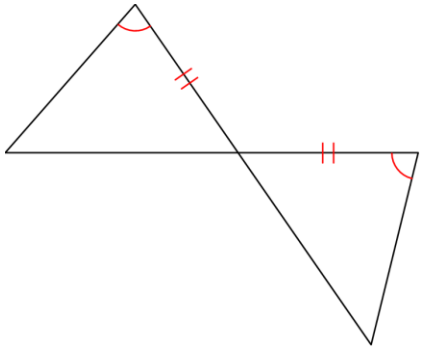
5. 

6. 

7. 

8. 

9. 

10. 

Congruent Triangles #3

Use the given information to determine whether or not $\Delta ABC \cong \Delta JKL$. Explain your reasoning. (Hint: You may want to make a sketch of the triangles.)

11. $\overline{AB} \cong \overline{JK},\ \overline{BC} \cong \overline{KL},\ \angle B \cong \angle K$

12. $\angle C \cong \angle L,\ \angle A \cong \angle J,\ \angle B \cong \angle K$

13. $\angle A \cong \angle K,\ \angle C \cong \angle L,\ \overline{AC} \cong \overline{JL}$

14. $\overline{CA} \cong \overline{LJ},\ \angle B \cong \angle K,\ \angle C \cong \angle L$

15. $\overline{AC} \cong \overline{JL},\ \overline{CB} \cong \overline{LK},\ \angle A \cong \angle J$

16. $\overline{BC} \cong \overline{KJ},\ \overline{CA} \cong \overline{LK},\ \overline{BA} \cong \overline{LJ}$

State the additional information that is needed to prove $\Delta DEF \cong \Delta MNO$ using the indicated postulate or theorem. (Hint: You may want to make a sketch of the triangles.)

17. **Given:** $\overline{DE} \cong \overline{MN}$
$\angle D \cong \angle M$
Method: SAS Congruence Postulate

18. **Given:** $\overline{EF} \cong \overline{NO}$
$\angle F \cong \angle O$
Method: ASA Congruence Postulate

19. **Given:** $\overline{FE} \cong \overline{ON}$
$\angle F \cong \angle O$
Method: AAS Congruence Theorem

20. **Given:** $\overline{DF} \cong \overline{MO}$
$\overline{ED} \cong \overline{NM}$
Method: SSS Congruence Postulate