LESSON 5.3

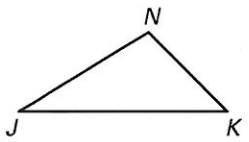
NAME _____ DATE _____

Practice A

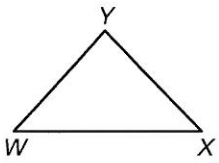
For use with pages 250–256

Tell whether the side is *included* or *not included* between the given angles.

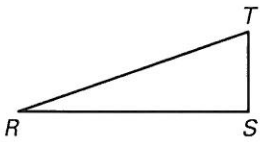
1. $\overline{JN}$ is __?__ between $\angle J$ and $\angle K$.



2. $\overline{YX}$ is __?__ between $\angle W$ and $\angle X$.

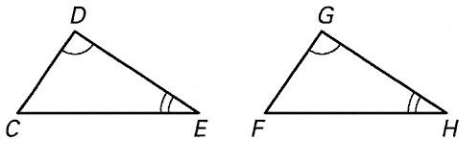


3. $\overline{RT}$ is __?__ between $\angle R$ and $\angle T$.

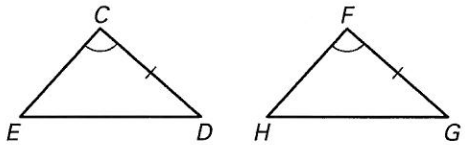


What congruence do you need to know in order to use the indicated postulate or theorem to conclude that $\triangle CDE \cong \triangle FGH$?

4. ASA Congruence Postulate

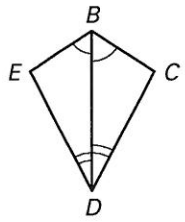


5. AAS Congruence Theorem

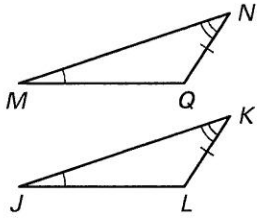


Tell which postulate or theorem you would use to show that the triangles are congruent. Explain your reasoning.

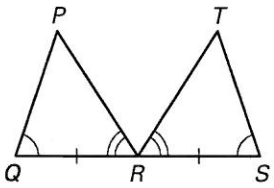
6.



7.



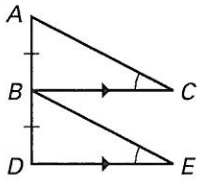
8.



9. Fill in the missing statements and reasons.

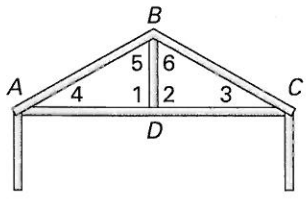
Given: $\angle C \cong \angle E$, $\overline{BC} \parallel \overline{DE}$, $\overline{AB} \cong \overline{BD}$

Prove: $\triangle ABC \cong \triangle BDE$



Statements	Reasons
1. $\angle C \cong \angle E$	1. __?__
2. $\overline{AB} \cong \overline{BD}$	2. Given
3. __?__	3. Given
4. $\angle ABC \cong \angle BDE$	4. __?__
5. $\triangle ABC \cong \triangle BDE$	5. __?__

The sketch at the right shows a side view of a frame for a tent.



10. If $\angle 5 \cong \angle 6$ and $\angle 4 \cong \angle 3$, tell which postulate or theorem you would use to show $\triangle BAD \cong \triangle BCD$.

11. If $\angle 1 \cong \angle 2$ and $\angle 5 \cong \angle 6$, tell which postulate or theorem you would use to show $\triangle BAD \cong \triangle BCD$.

Kuta Software - Infinite Geometry

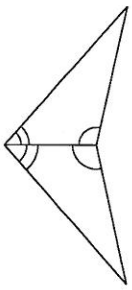
Name_____

ASA and AAS Congruence

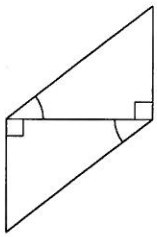
Date_____ Period____

State if the two triangles are congruent. If they are, state how you know.

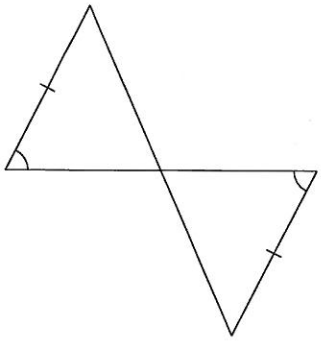
1)



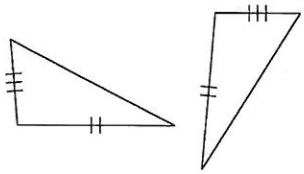
2)



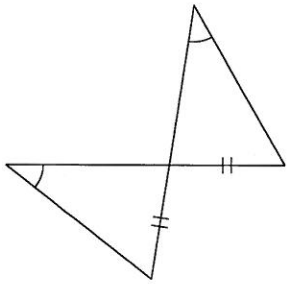
3)



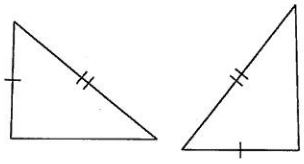
4)



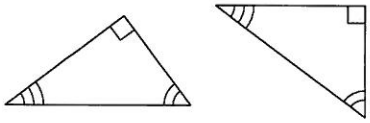
5)



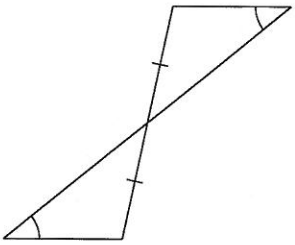
6)



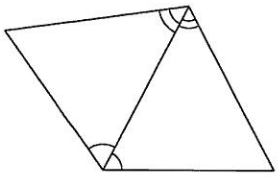
7)



8)



9)



10)