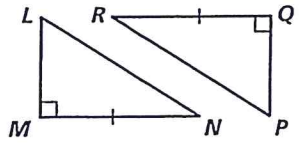
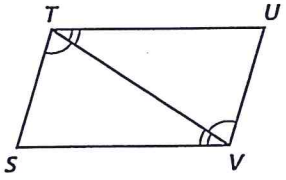
Name _____ Class _____ Date _____

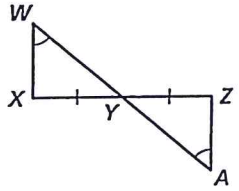
Practice 4-3

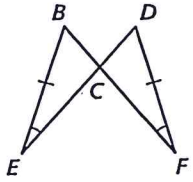
Triangle Congruence by ASA and AAS

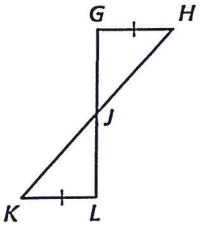
Tell whether the ASA Postulate or the AAS Theorem can be applied directly to prove the triangles congruent. If the triangles cannot be proved congruent, write *not possible*.

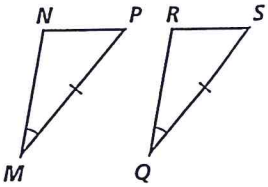
1. 

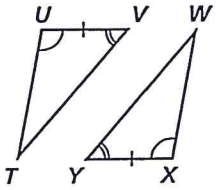
2. 

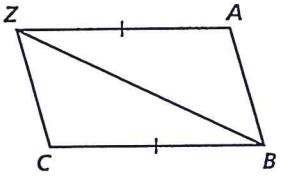
3. 

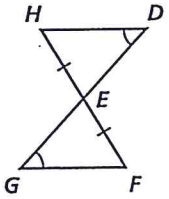
4. 

5. 

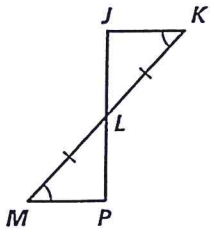
6. 

7. 

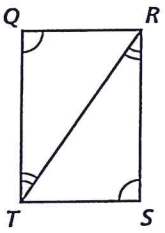
8. 

9. 

10. Write a two-column proof.
Given: $\angle K \cong \angle M$, $\overline{KL} \cong \overline{ML}$
Prove: $\triangle JKL \cong \triangle PML$

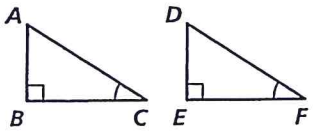


11. Write a proof.
Given: $\angle Q \cong \angle S$, $\angle TRS \cong \angle RTQ$
Prove: $\triangle QRT \cong \triangle STR$

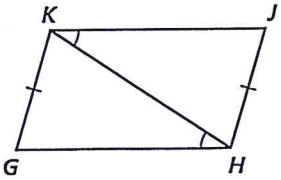


What else must you know to prove the triangles congruent for the reason shown?

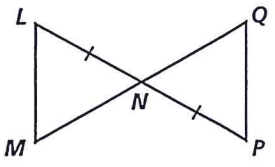
12. ASA



13. AAS



14. ASA

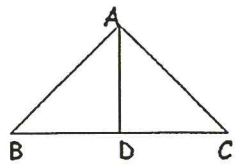


Proof Practice

1)

Given: $\overline{AD} \perp \overline{BC}$, $\overline{AD}$ bisects $\overline{BC}$

Prove: $\triangle ADB \cong \triangle ADC$

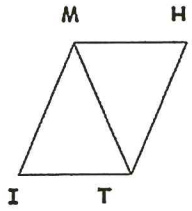


Statements	Reasons

2)

Given: $\overline{MH} \cong \overline{IT}, \overline{MI} \cong \overline{TH}$

Prove: $\triangle MIT \cong \triangle THM$

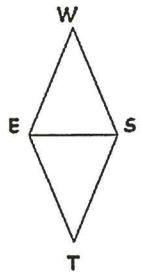


Statements	Reasons

3)

Given: $\overline{ES}$ bisects $\angle WET$, $\angle W \cong \angle T$

Prove: $\triangle WES \cong \triangle TES$

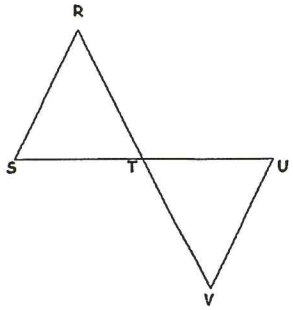


Statements	Reasons

4)

Given: $\angle S \cong \angle U$, T is the midpoint of $\overline{SU}$

Prove: $\triangle RTS \cong \triangle VTU$



Statements	Reasons