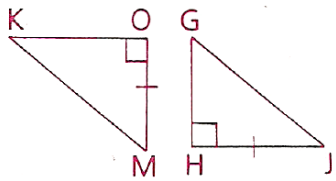
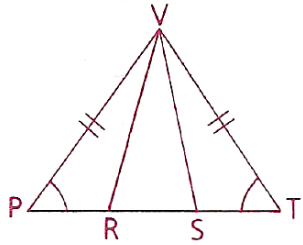
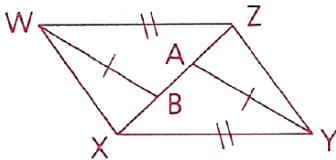
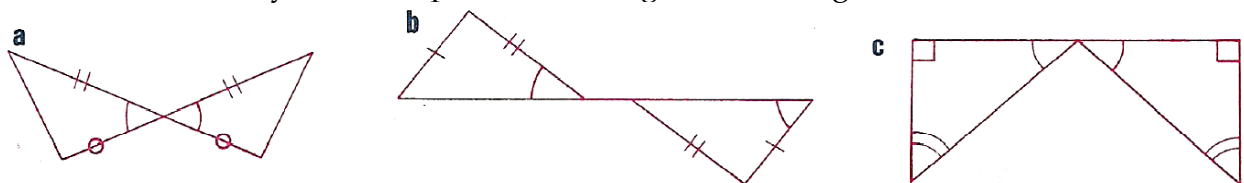


7.8D1 ~ Congruent Triangle Proofs

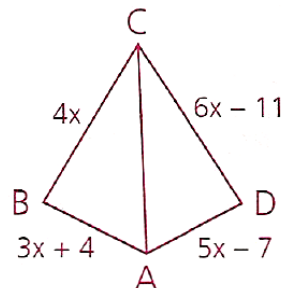
1. Study the congruent sides and angles shown by the tick marks and arc marks, then identify the additional information needed to support the specified method of proving that the indicated triangles are congruent.

	Triangles	Method	Needed Information
a.		$\triangle HGJ$ & $\triangle OKM$	SAS ASA
b.		$\triangle PSV$ & $\triangle TRV$	SAS ASA
c.		$\triangle WBZ$ & $\triangle YAX$	SSS SAS

2. Use the tick marks and arc marks for each pair of triangles, identify the method - SSS, SAS, or ASA - if any, that will prove the triangles to be congruent.

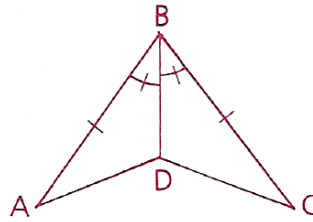


3. The perimeter of ABCD is 85.
 a. Set up and solve an equation to find the value of x .
 b. Is $\triangle ABC \cong \triangle ADC$?

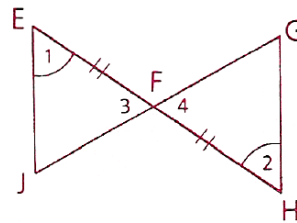


PROOFS MUST BE DONE ON PROOF PAPER.

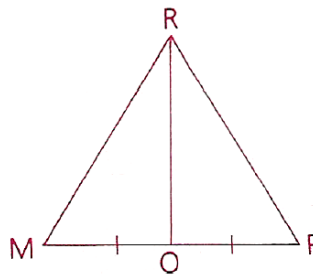
4. Given: $\overline{AB} \cong \overline{CB}$
 $\angle ABD \cong \angle CBD$
 Prove: $\triangle ABD \cong \triangle CBD$



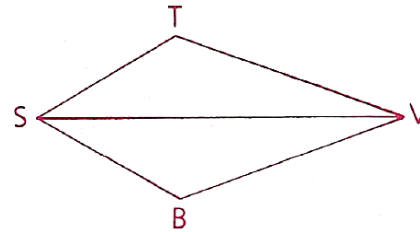
5. Given: $\angle 1 \cong \angle 2$
 $\overline{EF} \cong \overline{HF}$
 Prove: $\triangle EFJ \cong \triangle HFG$



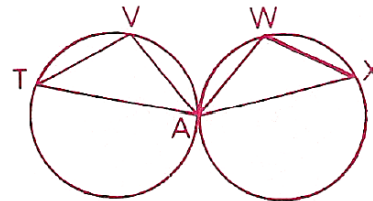
6. Given: $\overline{RO} \perp \overline{MP}$
 $\overline{MO} \cong \overline{OP}$
 Prove: $\triangle MRO \cong \triangle PRO$



7. Given: \overrightarrow{SV} bisects $\angle TSB$
 \overrightarrow{VS} bisects $\angle TVB$
 Prove: $\triangle TSV \cong \triangle BSV$



8. Given: $\overline{TV} \cong \overline{XW}$
 $\overline{VA} \cong \overline{WA}$
 $\overline{TA} \cong \overline{XA}$
 Prove: $\triangle TVA \cong \triangle XWA$



9. Given: $\overline{BC} \cong \overline{FE}$
 $\overline{DC} \cong \overline{DE}$
 $\angle 5 \cong \angle 6$
 Prove: $\triangle BDG \cong \triangle FDG$

