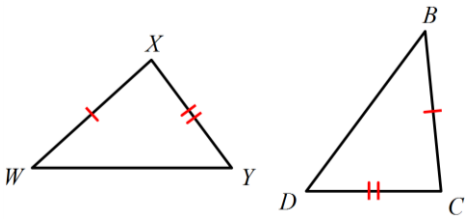
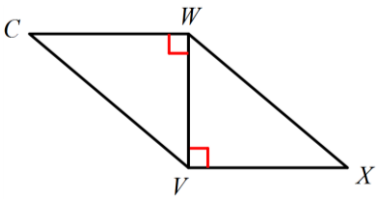
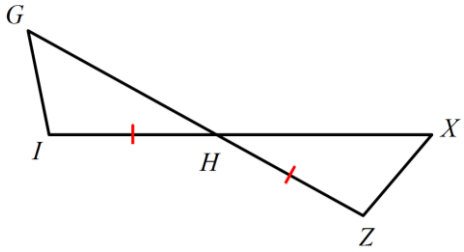
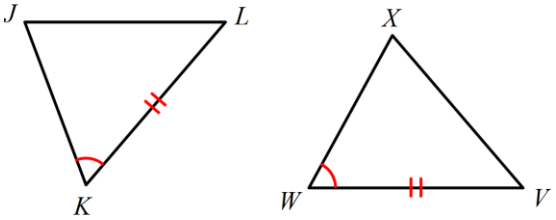
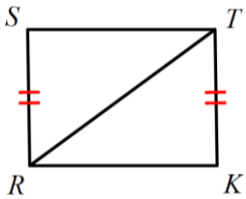
 Name: _____

Past due on: _____ Period _____

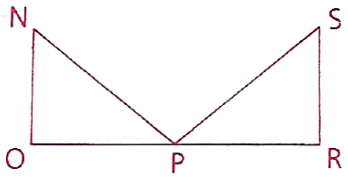
7.8D2 ~ Congruent Triangle Proofs

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.

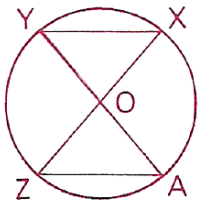
		Method	Known Congruences	Needed Congruences
1.		SSS		
2.		SAS		
3.		ASA		
4.		AAS		
5.		SAS		
6.		AAS		
7.		SAS		
8.		AAS		
9.		SSS		
10.		SAS		

PROOFS MUST BE DONE ON PROOF PAPER.

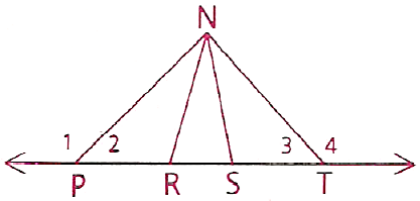
11. Given: $\angle N$ is comp. to $\angle NPO$
$\angle S$ is comp. to $\angle SPR$
$\angle NPO \cong \angle SPR$
$\overline{NP} \cong \overline{SP}$
Prove: $\triangle NOP \cong \triangle SRP$



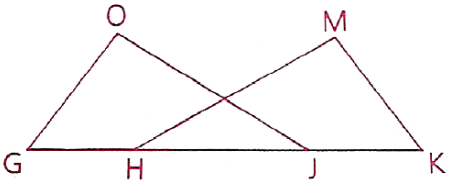
12. Given: O is the midpoint of $\overline{AY}$
O is the midpoint of $\overline{ZX}$
Prove: $\triangle ZOA \cong \triangle XOY$



13. Given: $\angle 1 \cong \angle 4$
$\overline{PR} \cong \overline{TS}$
$\overline{NP} \cong \overline{NT}$
Prove: $\triangle NPR \cong \triangle NTS$



14. Given: $\overline{GH} \cong \overline{KJ}$
$\overline{HM} \cong \overline{JO}$
$\overline{GO} \cong \overline{KM}$
Prove: $\triangle GOJ \cong \triangle KMH$



15. Given: $\angle R \cong \angle N$
$\overline{RP} \cong \overline{NT}$
$\overline{RT} \cong \overline{NP}$
$\overline{TS} \cong \overline{OP}$
Prove: $\triangle NOT \cong \triangle RSP$