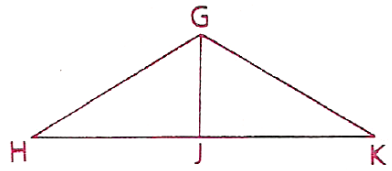
Name: _____

8.1 ~ HL Congruence Theorem

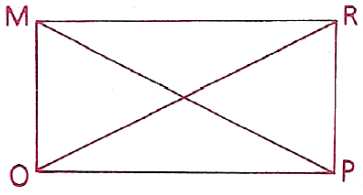
Past due on: _____ Period _____

PROOFS MUST BE DONE ON PROOF PAPER.

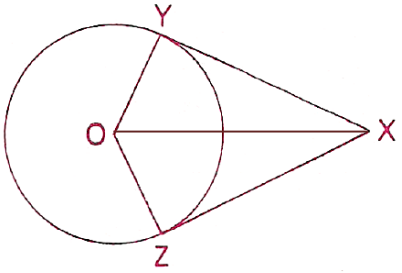
1. Given: $\overline{GJ}$ is the altitude to $\overline{HK}$
   $\overline{HG} \cong \overline{KG}$
   Prove: $\triangle HGJ \cong \triangle KGJ$



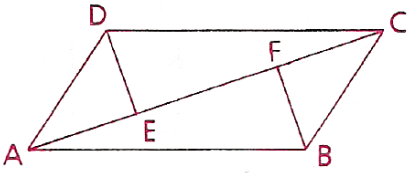
2. Given: $\overline{MO} \perp \overline{OP}$
   $\overline{RP} \perp \overline{OP}$
   $\overline{MP} \cong \overline{RO}$
   Prove: $\triangle MOP \cong \triangle RPO$



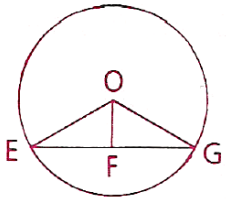
3. Given: $\overline{YO} \perp \overline{YX}$
   $\overline{ZO} \perp \overline{ZX}$
   $\overline{YO} \cong \overline{ZO}$
   Prove: $\triangle YOX \cong \triangle ZOX$



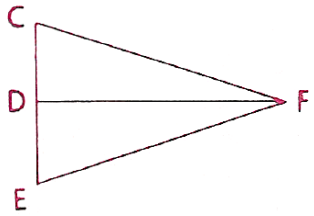
4. Given: $\overline{AE} \cong \overline{CF}$
   $\overline{AB} \cong \overline{CD}$
   $\angle BFA$ is a right $\angle$
   $\angle DEC$ is a right $\angle$
   Prove: $\triangle CDE \cong \triangle ABF$

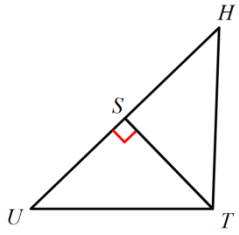
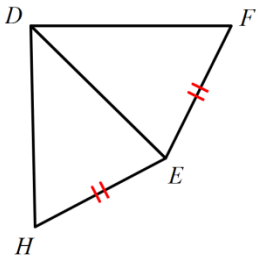
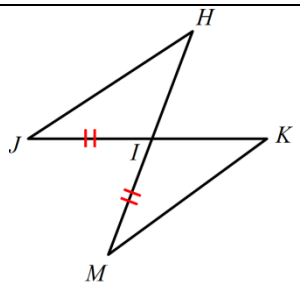
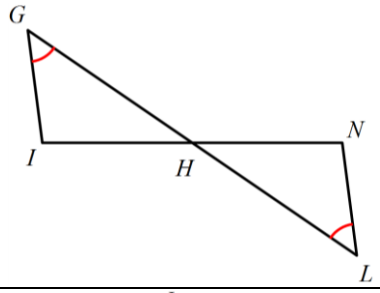
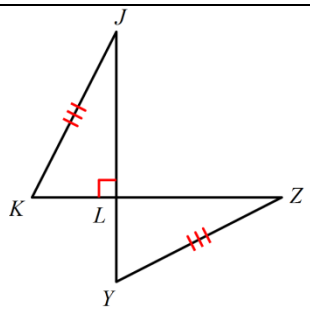


5. Given: $\overline{EO} \cong \overline{GO}$
   $\overline{OF}$ is an altitude
   Prove: $\triangle FOE \cong \triangle FOG$



6. Given: $\overline{FD}$ is an altitude
   $\overline{FD}$ bisects $\angle CFE$
   Prove: $\triangle CDF \cong \triangle EDF$



		WHAT I KNOW IS CONGRUENT	WHAT I NEED TO KNOW
7	HL 		
8	SAS 		
9	AAS 		
10	ASA 		
11	HL 		
12	AAS