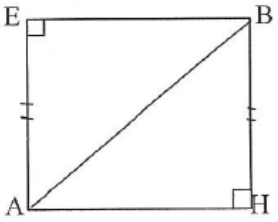
Name: Date: Period:

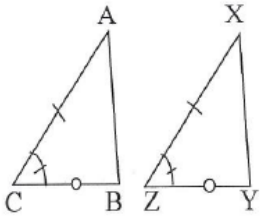
HW #5-7

1. Look at the markings in the diagram. Add your own for things such as "reflexive" and "vertical angles" etc. Then, state is the triangles are congruent by SSS≅, SAS≅, HL≅, ASA≅, or AAS≅ and complete the congruence statement.

a. 

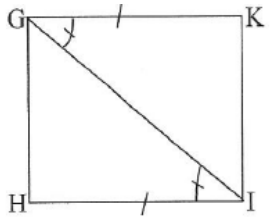
Δs ≅ by _____

$\Delta HBA \cong \Delta$ _____

b. 

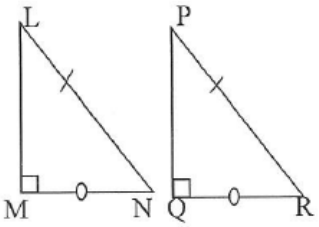
Δs ≅ by _____

$\Delta YZX \cong \Delta$ _____

c. 

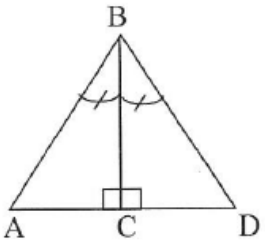
Δs ≅ by _____

$\Delta IKG \cong \Delta$ _____

d. 

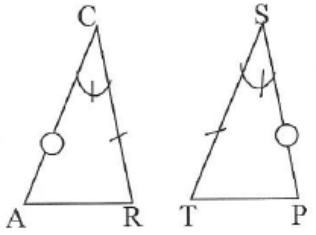
Δs ≅ by _____

$\Delta LMN \cong \Delta$ _____

e. 

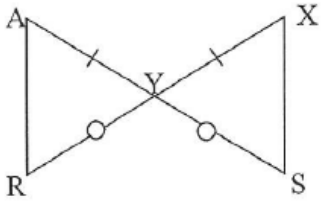
Δs ≅ by _____

$\Delta ACB \cong \Delta$ _____

f. 

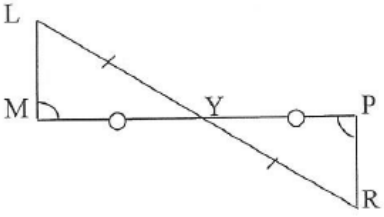
Δs ≅ by _____

$\Delta PTS \cong \Delta$ _____

g. 

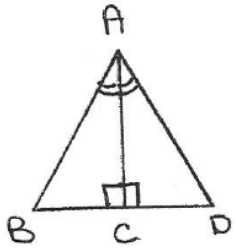
Δs ≅ by _____

$\Delta AYR \cong \Delta$ _____

h. 

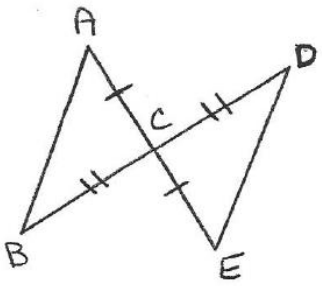
Δs ≅ by _____

$\Delta LMY \cong \Delta$ _____

i. 

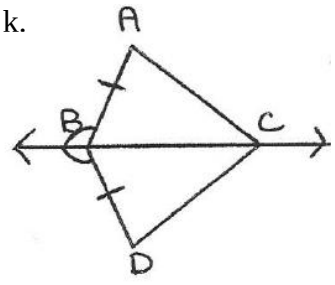
Δs ≅ by _____

$\Delta ABC \cong \Delta$ _____

j. 

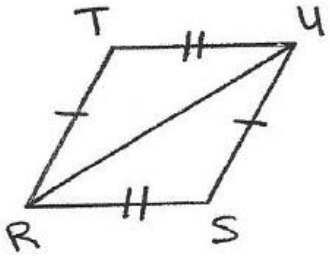
Δs ≅ by _____

$\Delta CDE \cong \Delta$ _____

k. 

Δs ≅ by _____

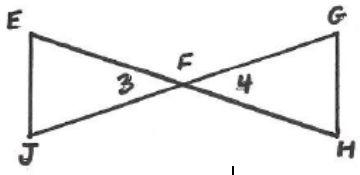
$\Delta DCB \cong \Delta$ _____

l. 

Δs ≅ by _____

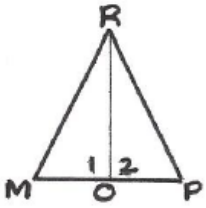
$\Delta RSU \cong \Delta$ _____

2. **Given**: $\angle E \cong \angle H$
   $\overline{EF} \cong \overline{HF}$
   Prove: $\Delta EFJ \cong \Delta HFG$



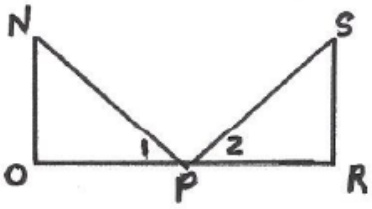
Statements	Reasons

3. **Given**: $\angle 1 \cong \angle 2$
   O is the midpoint of $\overline{MP}$
   Prove: $\Delta MRO \cong \Delta PRO$



Statements	Reasons

4. **Given**: $\angle N$ comp $\angle 1$
   $\angle S$ comp $\angle 2$
   $\angle 1 \cong \angle 2$
   $\overline{NP} \cong \overline{SP}$
   Prove: $\Delta NOP \cong \Delta SRP$



Statements	Reasons