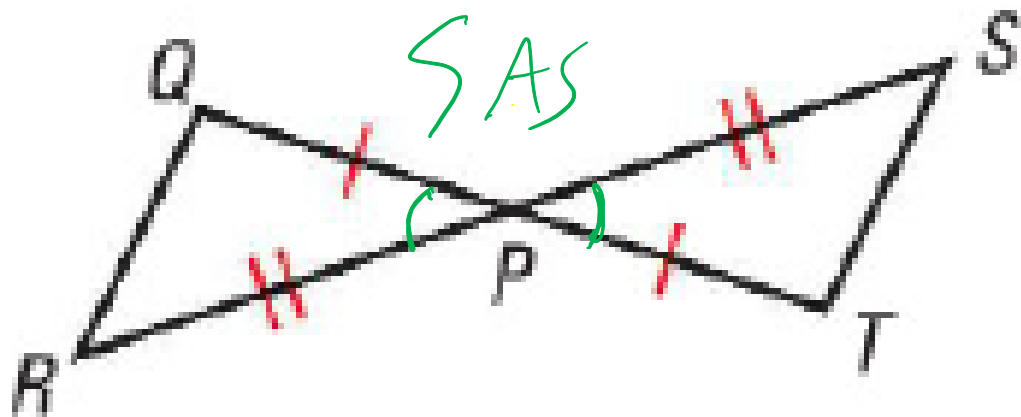
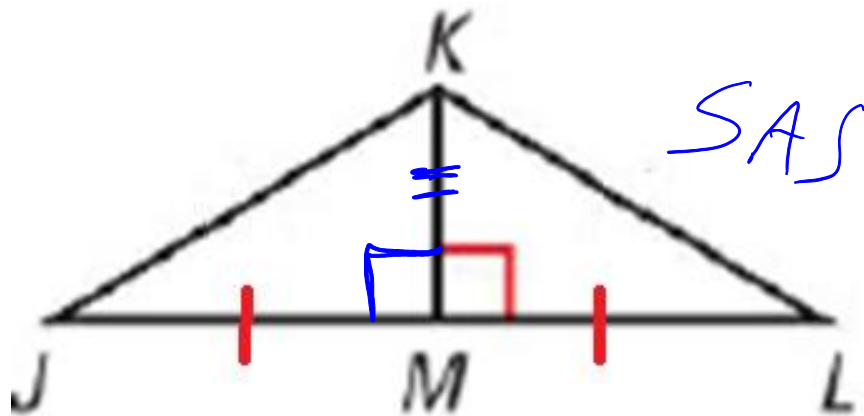
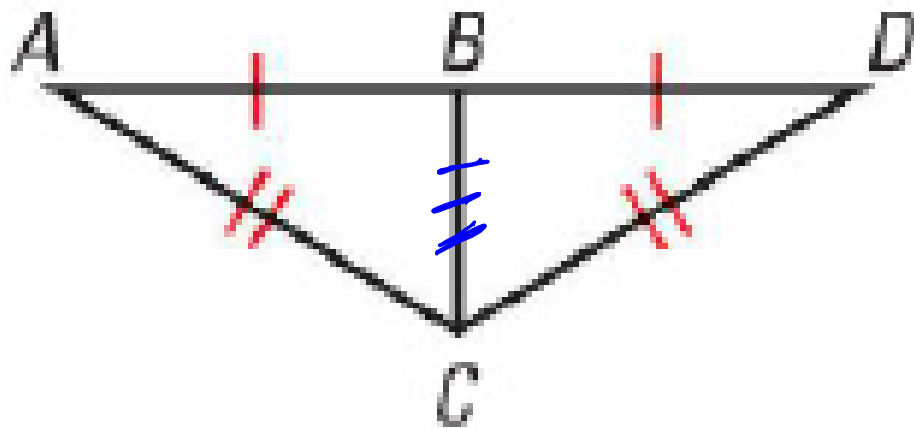


Determine if the following triangles are congruent and name the postulate used.

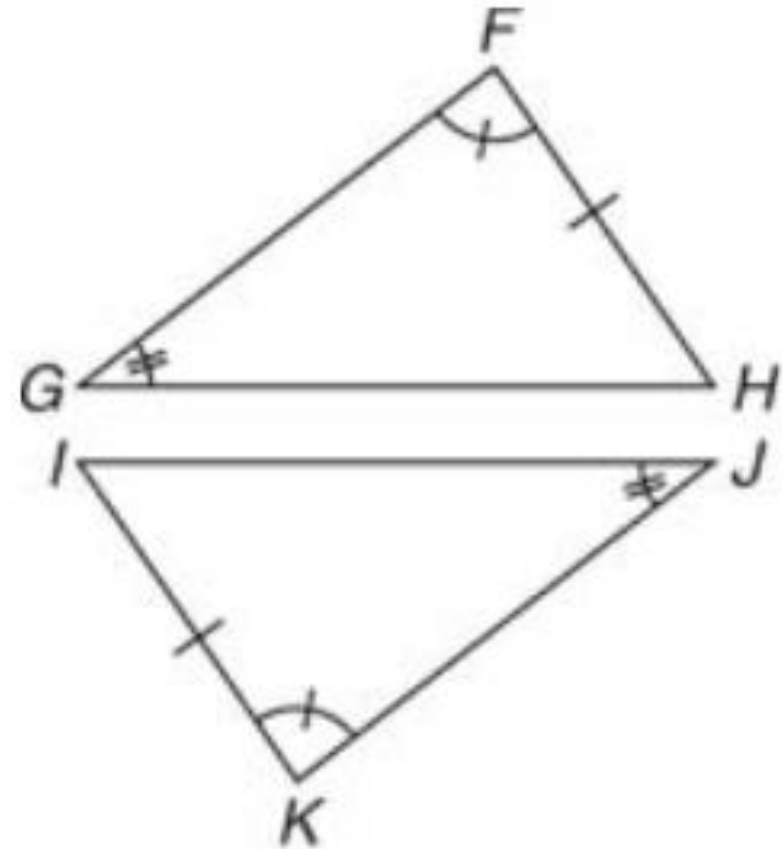


SSS



# (AAS) Angle-Angle-Side Theorem

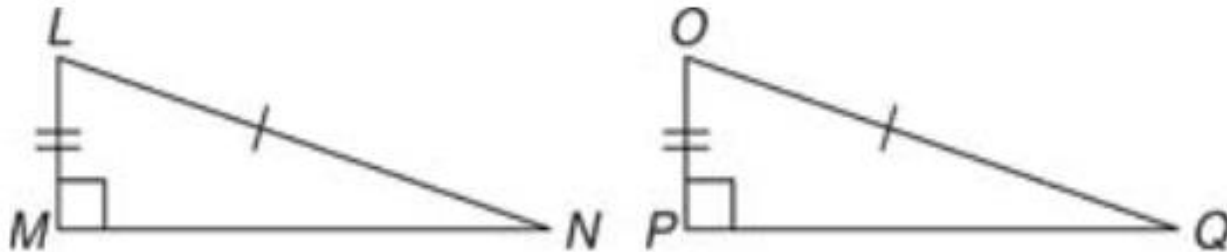
- If two angles and a non-included side of one triangle are congruent to two angles and the corresponding non-included side of a second triangle, then the triangles are congruent.



$\triangle FGH \cong \triangle KJI$  by AAS

# **(HL) Hypotenuse - Leg $\cong$ Theorem**

- If the hypotenuse and a leg of a right  $\Delta$  are  $\cong$  to the hypotenuse and a leg of a second  $\Delta$ , then the 2  $\Delta$ s are  $\cong$ .

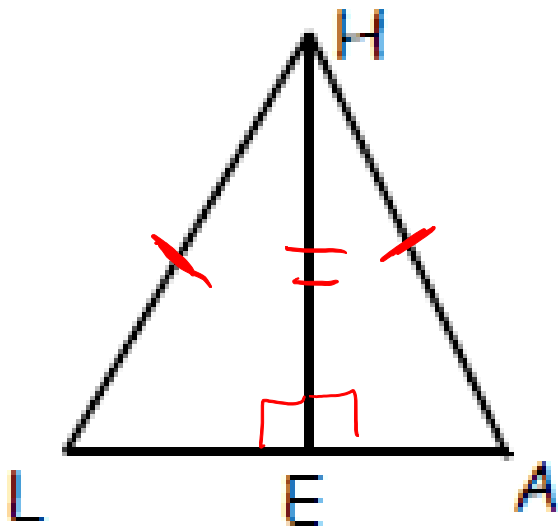


$\Delta LMN \cong \Delta OPQ$  by HL

The hypotenuse and one leg (HL) of the first right triangle are congruent to the corresponding parts of the second right triangle.

KAHOOT

Given that  $\overline{HE} \perp \overline{LA}$  and  $\overline{HL} \cong \overline{HA}$ , prove the triangles are congruent.



$$\overline{HE} \perp \overline{LA}$$

$$\overline{HL} \cong \overline{HA}$$

Given

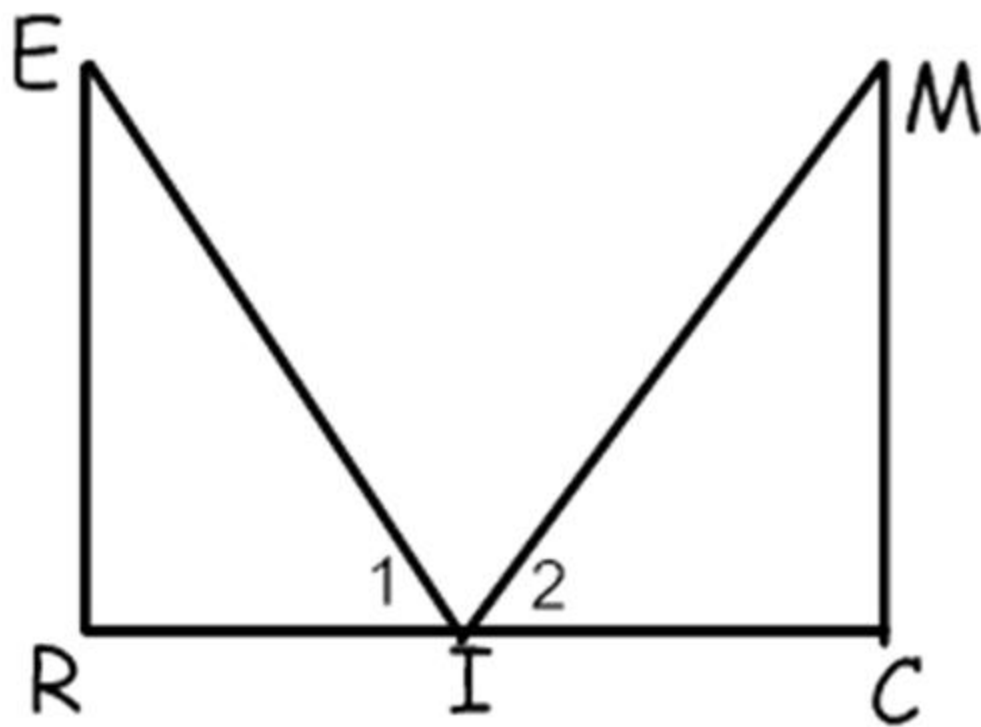
$\angle HEA, \angle HEL$   
are right  $\angle$ 's

Def of  $\perp$

$\triangle HEL, \triangle HEA$  right  $\triangle$ 's

def

Given  $\angle 1 \cong \angle 2$ ,  $\angle E \cong \angle M$  and I is the midpoint of  $\overline{RC}$ , prove the triangles are congruent.



## Example :

Given:  $M$  is the midpoint  
of  $\overline{XY}$ .

Prove:  $\angle A \cong \angle B$

