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


## (AAS) Angle-Angle-Sid

 TheoremIf two angles and a nonincluded side of one triangle are congruent to two angles and the corresponding nonincluded side of a second triangle, then the triangles are congruent.

$\triangle F G H \cong \triangle K J l$ by $A A S$

# (HL) Hypotenuse - Leg 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 $\cong$.

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 $\overline{H E} \perp \overline{L A}$ and $\overline{H L} \cong \overline{H A}$, prove the triangles are congruent.


|  |  |
| :---: | :---: |
| $\overline{H E} \perp \overline{L A}$ | Given |
| $\overline{H L} \cong \overline{H A}$ |  |
| $\angle H E A, \angle H E L$ <br> are right $\angle ;$ | Def of $\perp$ |
| $\triangle H E L, \triangle H E A$ right $\Delta S$ | defofright $\triangle$ |
| $\overline{H E} \cong \overline{H E}$ | Reflexprop of $\cong$ |
| $\triangle H E L \cong \triangle H E A$ | $H L$ |

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


## Example :

Given: M is the midpoint of $\overline{X Y}$.
Prove: $<A \cong<B$


