

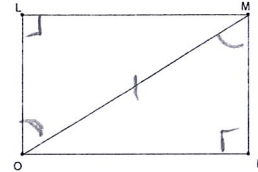
1. If $\triangle MNB \cong \triangle LKJ$, then

$$\angle M \cong \angle L$$

$$\overline{KJ} \cong \overline{NB}$$

2. Given: $\angle L$ and $\angle N$ are Rt angles, $\angle LOM \cong \angle NMO$

Prove: $\triangle MLO \cong \triangle ONM$

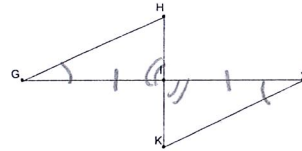


① $\angle L \cong \angle N$ RT $\angle LOM \cong \angle NMO$ ② $\overline{OM} \cong \overline{OM}$ ③ $\triangle MLO \cong \triangle ONM$	① given ② Refl. Prop. ③ AAS (1,2)
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2. Given: I is the midpoint of \overline{GJ}

$$\angle G \cong \angle J$$

Prove: $\angle H \cong \angle K$

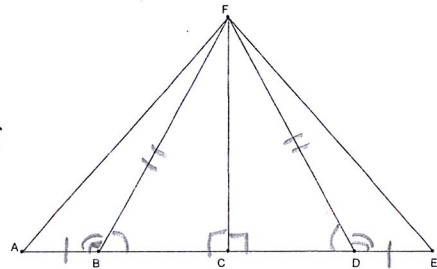


① I midpt \overline{GJ} $\angle G \cong \angle J$ ② $\overline{GI} \cong \overline{JI}$ ③ $\angle HIG \cong \angle JIK$ ④ $\triangle GHI \cong \triangle JIK$ ⑤ $\angle H \cong \angle K$	① given ② Def midpt ③ vert \angle s ④ ASA (1,2,3) ⑤ CPCTC
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3. Given: $\overline{AB} \cong \overline{DE}$, $\angle FBC \cong \angle FDC$, $\overline{AE} \perp \overline{FC}$

Prove: $\triangle ABF \cong \triangle EDF$

You'll have to prove another 2 \triangle s congruent, then use CPCTC to prove $\triangle ABF \cong \triangle EDF$.



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$$\begin{aligned} \textcircled{1} \quad \overline{AB} &\cong \overline{DE} \\ \angle FBC &\cong \angle FDC \\ \overline{AE} &\perp \overline{FC} \end{aligned}$$

$\textcircled{2}$ $\angle FCB$ & $\angle FCD$ are RT

$$\textcircled{3} \quad \overline{FC} \cong \overline{FC}$$

$$\textcircled{4} \quad \triangle BCF \cong \triangle DCF$$

$$\textcircled{5} \quad \overline{BF} \cong \overline{DF}$$

$\textcircled{6}$ $\angle ABF$ supp to $\angle CBF$
 $\angle EDF$ supp to $\angle CDF$

$$\textcircled{7} \quad \angle ABF \cong \angle EDF$$

$$\textcircled{8} \quad \triangle ABF \cong \triangle EDF$$

$\textcircled{1}$ given

$\textcircled{2}$ Def \perp

$\textcircled{3}$ Reflex

$\textcircled{4}$ AAS (1, 2, 3)

$\textcircled{5}$ CPCTC

$\textcircled{6}$ Lin Pairs

$\textcircled{7}$ Cong Suppl. Thm.

$\textcircled{8}$ SAS (1, 5, 7)

QED!