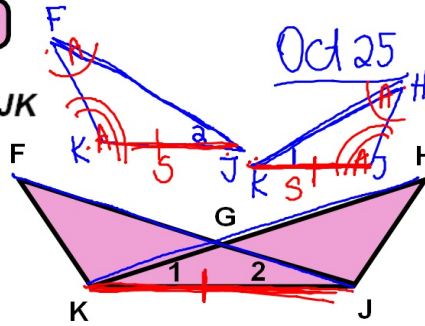


4-5 More Proving Triangles Congruent

ex. 1

Given: $\angle F \cong \angle H$, $\angle FKJ \cong \angle HJK$

Prove: $\overline{FJ} \cong \overline{HK}$

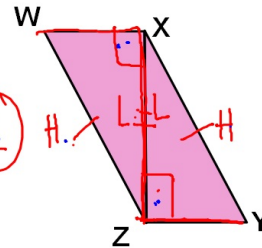


statements	reasons
① $\angle F \cong \angle H$, $\angle FKJ \cong \angle HJK$	① Given
② $\overline{KJ} \cong \overline{JK}$	② reflexive
③ $\triangle FJK \cong \triangle HJK$	③ AAS \cong
④ $\overline{FJ} \cong \overline{HK}$	④ CPCTC

ex. 2

Given: $\overline{WX} \perp \overline{XZ}$, $\overline{YZ} \perp \overline{ZX}$, $\overline{WZ} \cong \overline{YX}$

Prove: $\angle W \cong \angle Y$



statements	reasons
① $\overline{WX} \perp \overline{XZ}$, $\overline{YZ} \perp \overline{ZX}$ $\overline{WZ} \cong \overline{YX}$	① Given
② $\angle WXZ$ & $\angle YZX$ are rt \angle s	② defn \perp lines
③ $\triangle WXZ$ & $\triangle YZX$ are rt \triangle s	③ rt \triangle has rt \angle
④ $\overline{XZ} \cong \overline{ZX}$	④ reflexive
⑤ $\triangle WXZ \cong \triangle YZX$	⑤ HL \cong
⑥ $\angle W \cong \angle Y$	⑥ CPCTC