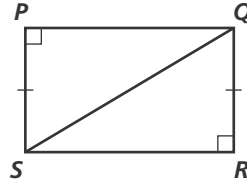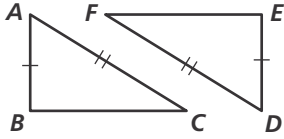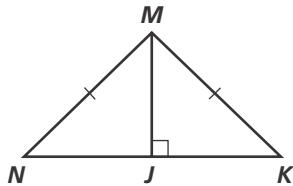# Practice 4-6

**Congruence in Right Triangles**

**Write a two-column proof.**

1. Given: $\overline{AB} \perp \overline{BC}$, $\overline{ED} \perp \overline{FE}$, $\overline{AB} \cong \overline{ED}$, $\overline{AC} \cong \overline{FD}$
   Prove: $\triangle ABC \cong \triangle DEF$

2. Given: $\angle P$ and $\angle R$ are right angles, $\overline{PS} \cong \overline{QR}$
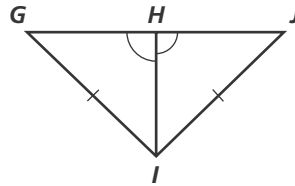   Prove: $\triangle PQS \cong \triangle RSQ$

**Write a flow proof.**

3. Given: $\overline{MJ} \perp \overline{NK}$, $\overline{MN} \cong \overline{MK}$
   Prove: $\triangle MJN \cong \triangle MJK$

4. Given: $\overline{GI} \cong \overline{JI}$, $\angle GHI \cong \angle JHI$
   Prove: $\triangle IHG \cong \triangle IHJ$

**What additional information do you need to prove each pair of triangles congruent by the HL Theorem?**

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