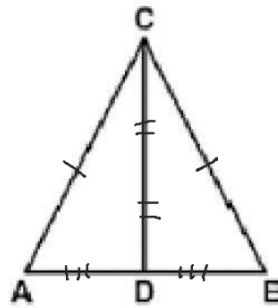


Model Problem #1

Given: $\overline{AC} \cong \overline{BC}$
D is the midpoint of \overline{AB}

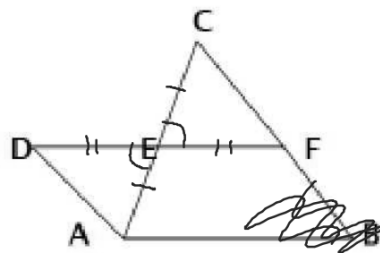
Prove: $\triangle ACD \cong \triangle BCD$



Statement	Reason
1) $\overline{AC} \cong \overline{BC}$ D is the midpt of \overline{AB}	1) Given
2) $\overline{DC} \cong \overline{DC}$	2) Reflexive prop
3) $\overline{AD} \cong \overline{BD}$	3) Def of midpt
4) $\triangle ACD \cong \triangle BCD$	4) SSS

Given: \overline{AC} and \overline{DF} bisect each other at E

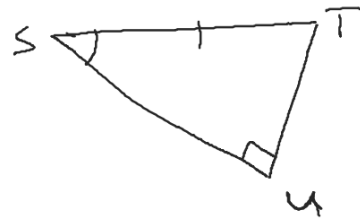
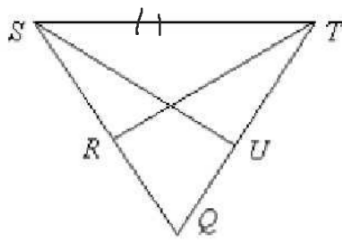
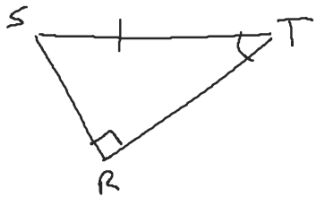
Prove: $\triangle DEA \cong \triangle FEC$



Statement	Reason
1) \overline{AC} & \overline{DF} Bisect each other @ E	1) Given
2) $\overline{AE} \cong \overline{CE}$ $\overline{DE} \cong \overline{FE}$	2) Def of Bisector
3) $\angle AED \cong \angle CEF$	3) Vertical \angle 's \cong

Given: $\overline{SR} \perp \overline{RT}$; $\overline{TU} \perp \overline{US}$; $\angle STR \cong \angle TSU$

Prove: $\triangle TRS \cong \triangle SUT$



Statement	Reason
1) $\overline{SR} \perp \overline{RT}$ $\overline{TU} \perp \overline{US}$ $\angle STR \cong \angle TSU$	1) Given
2) $\angle SRT \cong \angle TUS$	2) All Rt \angle 's \cong
3) $\overline{ST} \cong \overline{ST}$	3) Reflexive prop
4)	4)