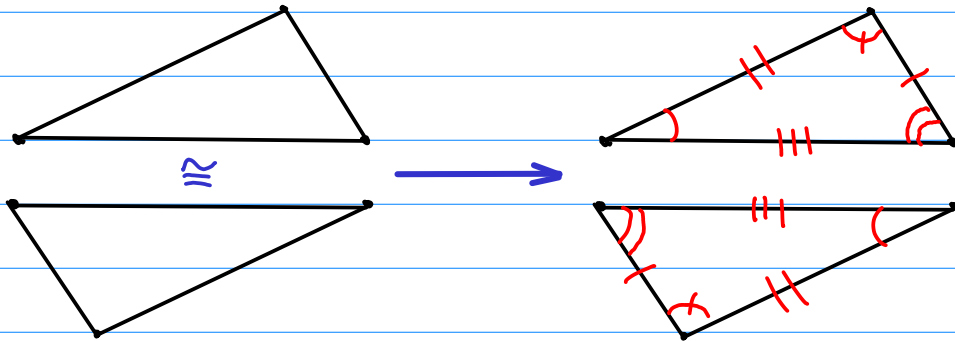
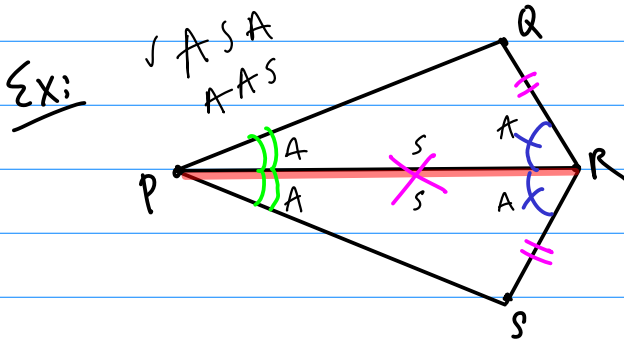


§4.6: CPTC

* Defn of $\cong \Delta$'s: If 2 Δ 's are \cong , then their CORRESPONDING PARTS are \cong .



* CPTC^{"E"}: Corresponding Parts of Congruent (\cong) Triangles (Δ 's) are Congruent (\cong).



Given: \overline{PR} bisects $\angle QRS$ & $\angle QPS$.

Prove: $\overline{RQ} \cong \overline{RS}$

Pr proof:

Since \overline{PR} bisects $\angle QRS$, $\angle QRP \cong \angle SRP$ by defn of \angle bisector.
 Similarly, since \overline{PR} bisects $\angle QPS$, $\angle QPR \cong \angle SPR$. By reflexive, $\overline{PR} \cong \overline{PR}$. By ASA, $\Delta QRP \cong \Delta SRP$. By ASA, $\Delta QRP \cong \Delta SRP$.

Finally, $\overline{RQ} \cong \overline{RS}$ by CPTC. ■

III

- I. Show parts of Δ 's \cong
- II. Show Δ 's are \cong
- III. Show corr. parts of the Δ 's are \cong .