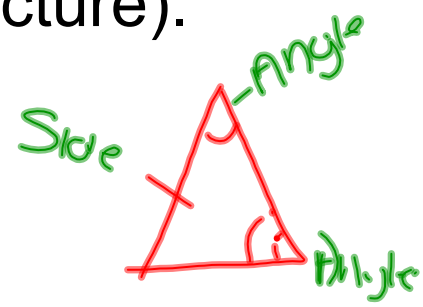
Exit Ticket:

What is the difference in ASA and AAS? Be specific (maybe a picture).



Chapter 4.6: Use Congruent Triangles

Remember CPCTC.....

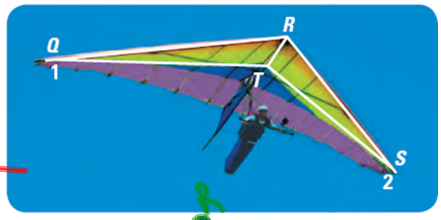
- What do I have to prove first?

$\triangle ABC \cong \triangle XYZ \ldots$

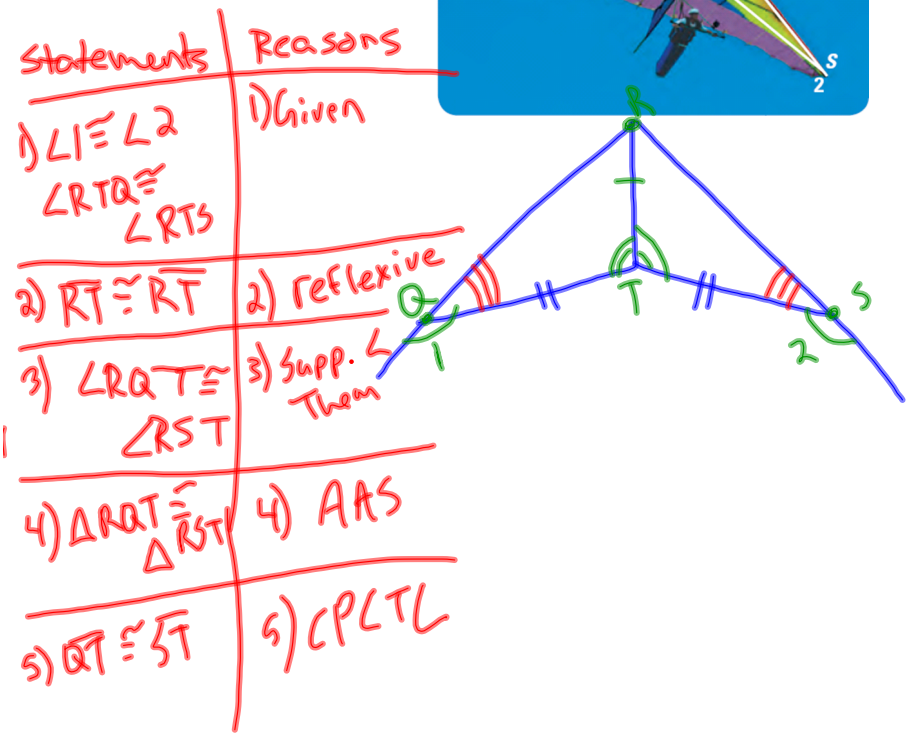
have $\cong$ triangles before

Given: $\angle 1 \cong \angle 2, \angle RTQ \cong \angle RTS$

Prove: $\overline{QT} \cong \overline{ST}$

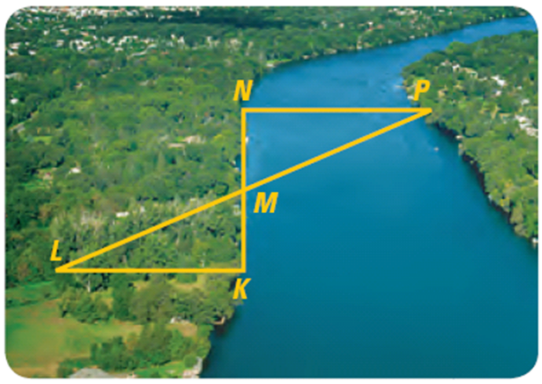


Statements	Reasons
1) $\angle 1 \cong \angle 2$, $\angle RTQ \cong \angle RTS$	1) Given
2) $\overline{RT} \cong \overline{RT}$	2) reflexive
3) $\angle RQT \cong \angle RST$	3) Supp. $\angle$s Thm
4) $\triangle RQT \cong \triangle RST$	4) AAS
5) $\overline{QT} \cong \overline{ST}$	5) CPCTC



Place a stake at K on the near side so that $\overline{NK} \perp \overline{NP}$

Find M, the midpoint of NK .

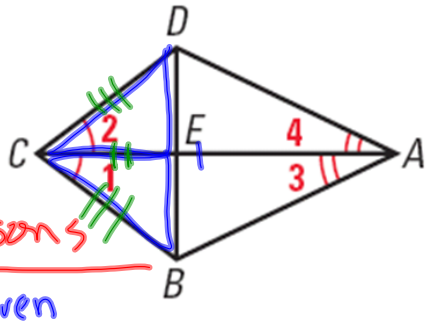


Locate the point L so that $\overline{NK} \perp \overline{KL}$ and L, P, and M are collinear.

- **Explain how this plan allows you to find the distance.**

Given: $\angle 1 \cong \angle 2, \angle 3 \cong \angle 4$

Prove: $\Delta BCE \cong \Delta DCE$



Statement	Reasons
1) $\angle 1 \cong \angle 2$, $\angle 3 \cong \angle 4$	1) Given
2) $\overline{CA} \cong \overline{CA}$	2) Reflexive
3) $\Delta CDA \cong \Delta CBA$	3) ASA
4) $\overline{CE} \cong \overline{CE}$	4) Reflexive
5) $\overline{CB} \cong \overline{CD}$	5) CPCTC
6) $\Delta BCE \cong \Delta DCE$	6) SAS

Copy an Angle:

Bisect an Angle:

Homework: Ch 4.6 pg.259
#'s 4,6,10,16,24,26,34