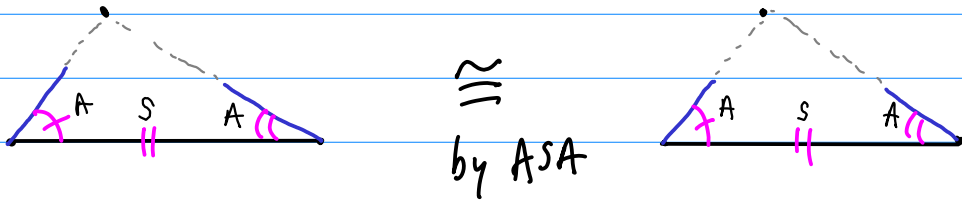


SSS
SAS

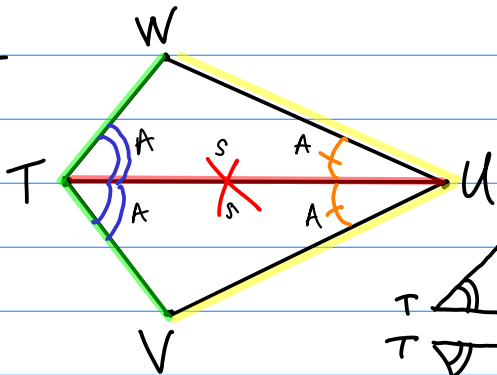
4.5: $\cong \Delta$'s #2

* ASA ("angle-side-angle")



Ex:

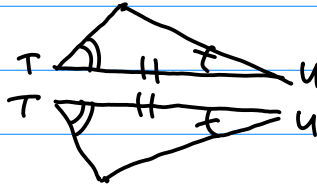
SSS
SAS
ASA



Given:

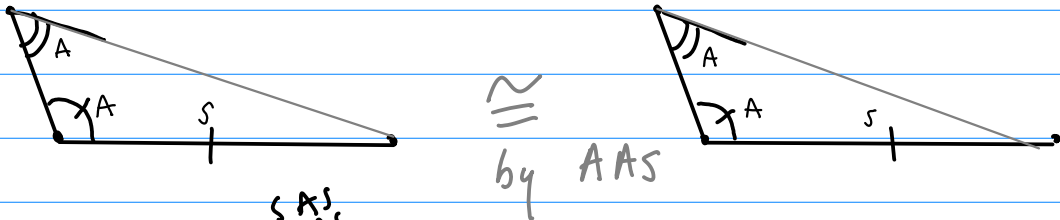
\overline{TU} bisects $\angle VTW$ & $\angle VUW$

$\Delta TWU \cong \Delta TVU$
by ASA.



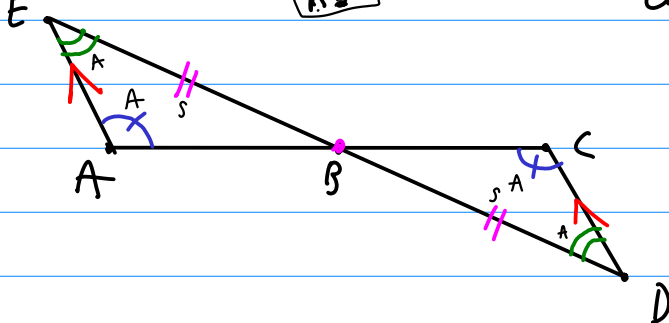
SAA

* AAS ("angle-angle-side"):



Ex:

SAS
SSS
AAS
ASA



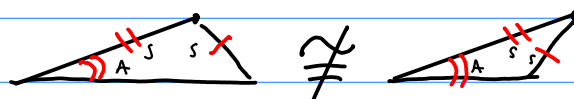
Given: $\checkmark \overline{AE} \parallel \overline{CD}$;
 $\checkmark B$ is midpt of \overline{DE}

$\Delta BCD \cong \Delta BAE$
by AAS.

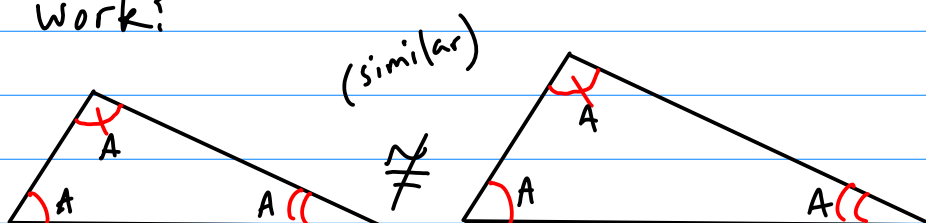
So far, we have these \triangle congruency conjectures/shortcuts:
 $\{ SSS, SAS, ASA, AAS \}$

• Does SSA work?

COUNTEREXAMPLE:

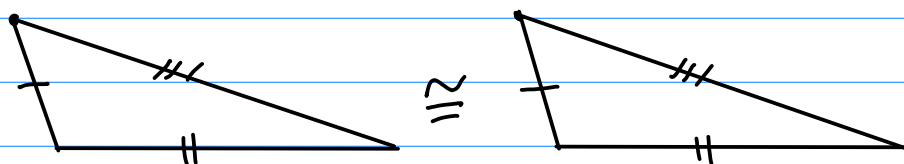


• Does AAA work?



Summary of the \triangle Congruency Conjectures :

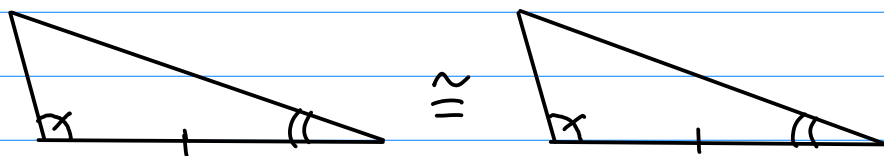
• SSS



• SAS



• ASA



• AAS

