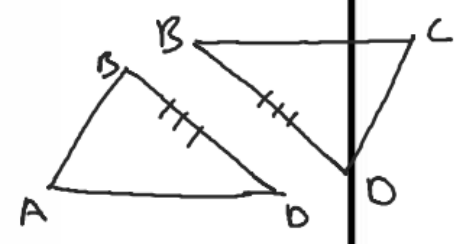
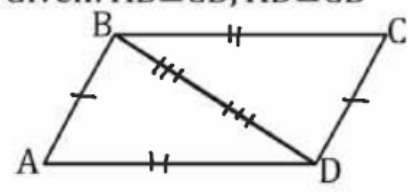


- ≅
- SSS
- SAS
- ~~AAS~~
- ~~ASA~~
- ~~HL~~

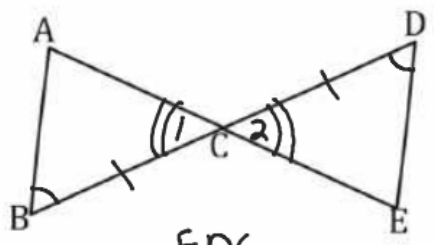
Given: $\overline{AB} \cong \overline{CD}$, $\overline{AD} \cong \overline{CB}$



Prove: $\triangle ABD \cong \triangle CBD$

Statement	Reason
1) $\overline{AB} \cong \overline{CD}$; $\overline{AD} \cong \overline{CB}$	1) Given
2) $\overline{BD} \cong \overline{BD}$	2) Reflexive Prop
3) $\triangle ABD \cong \triangle CBD$	3) SSS

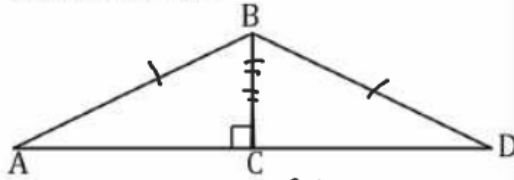
Given: \overline{AE} Bisects \overline{BD} , $\angle B \cong \angle D$



Prove: $\triangle ABC \cong \triangle EDC$

Statement	Reason
1) \overline{AE} bisects \overline{BD} $\angle B \cong \angle D$	1) Given
2) $\angle 1 \cong \angle 2$	2) Vertical \angle 's \cong .
3) $\overline{BC} \cong \overline{DC}$	3) Definition of Bisector
4) $\triangle ABC \cong \triangle EDC$	4) ASA

Given: $\overline{AB} \cong \overline{BD}$

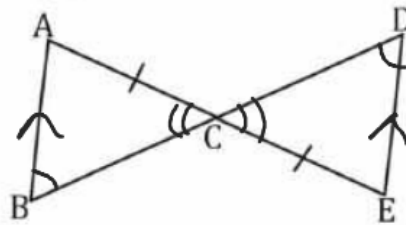


Prove: $\triangle ABC \cong \triangle DCB$

4) $\triangle ABC \cong \triangle DCB$ } 4) HL

Statement	Reason
1) $\overline{AB} \cong \overline{BD}$	1) Given
$\angle BCA + \angle BCD$ are Rt \angle 's	2) Def of Rt \triangle
2) $\triangle ACB + \triangle DCB$ are Rt \triangle 's	3) Reflexive prop
3) $\overline{BC} \cong \overline{BC}$	

Given $\overline{AB} \parallel \overline{ED}$, $\overline{AC} \cong \overline{EC}$



Prove: $\triangle ABC \cong \triangle EDC$