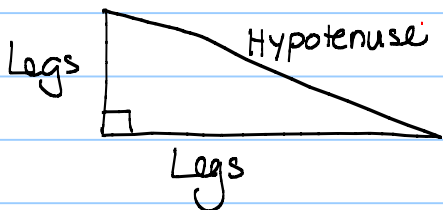


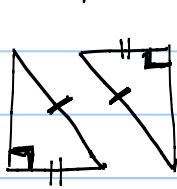
$\cong \triangle$: SSS (3 PR \cong SDS)
 SAS (\cong S, \cong L, \cong S) ~~\triangle~~
 ASA (\cong L, \cong S, \cong L) \triangle , \triangle
 HL

Now look at rt \triangle

Def rt. \triangle ? \rightarrow need right \angle



New postulate (read p 156)

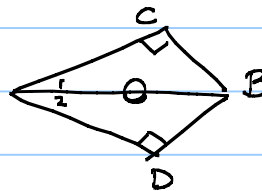


We need

- ① RT \triangle s \Rightarrow RT \angle s (NOT \cong \angle s)
- ② Hypotenuse \cong
- ③ Leg \cong

Ex: G: $\overline{BC} \perp \overline{AC}$, $\overline{BD} \perp \overline{AD}$, $\overline{AC} \cong \overline{AD}$

P: \overline{AB} bis $\angle CAD$



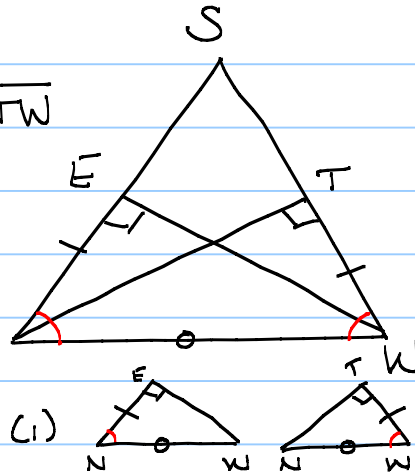
S

R

- 1. $\overline{BC} \perp \overline{AC}$ & $\overline{BD} \perp \overline{AD}$
- 2. $\angle ACB$ & $\angle ADB$ RT \angle s
- 3. $\overline{AC} \cong \overline{AD}$
- 4. $\overline{AB} \cong \overline{AB}$
- 5. $\triangle ACB \cong \triangle ADB$
- 6. $\angle 1 \cong \angle 2$
- 7. \overline{AB} bis $\angle CAD$

- 1. GIVEN
- 2. $\perp \Rightarrow$ RT \angle s
- 3. REF
- 4. GIVEN
- 5. HL (2 3 4)
- 6. CPCTC (5)
- 7. $\cong \angle$ s \Rightarrow \angle bis

Ex 2 G: $\overline{WE} \perp \overline{SN}$, $\overline{NT} \perp \overline{SW}$, $\overline{EN} \cong \overline{TW}$
 P: $\overline{SN} \cong \overline{SW}$



- | | | | |
|------|------------------------------------------------------------------------------|------------------------------------------|----------|
| | <u>S</u> | | <u>R</u> |
| | 1. $\overline{WE} \perp \overline{SN}$ & $\overline{NT} \perp \overline{SW}$ | 1. GIVEN | |
| R/Ls | 2. $\angle NEW$ & $\angle WTN$ | 2. $\perp \Rightarrow$ RT \angle s | (1) |
| H. | 3. $\overline{NW} \cong \overline{WN}$ | 3. REF | |
| L | 4. $\overline{EN} \cong \overline{TW}$ | 4. GIVEN | |
| | 5. $\triangle NEW \cong \triangle WTN$ | 5. HL (2 3 4) | |
| | 6. $\angle ENW \cong \angle TWN$ | 6. CPCTC (5) | |
| | 7. $\overline{SN} \cong \overline{SW}$ | 7. $\triangle \Rightarrow$ XX | |