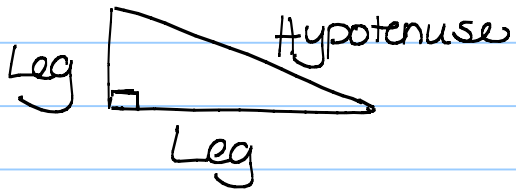
Note Title 10/23/2015

$\cong$ △s POSTULATES : SAS ($\cong$ s, $\cong$ ∠, $\cong$ s)
SSS (3 PAIR $\cong$ s)
ASA ($\cong$ ∠, $\cong$ s, $\cong$ ∠)
HL (RT ∠s, $\cong$ H, $\cong$ L)

Now look at rt △s

Def of rt △: has 1 right ∠

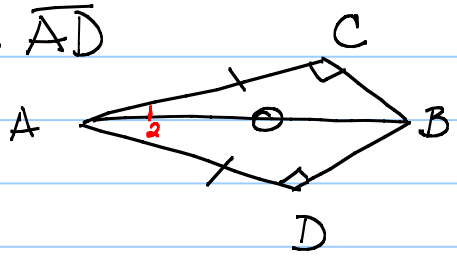


New postulate (p 156)

What do we need?

1. RT △s: RT ∠s (NOT $\cong$ ∠s)
2. hypotenuse ($\cong$ segs)
3. leg ($\cong$ segs)

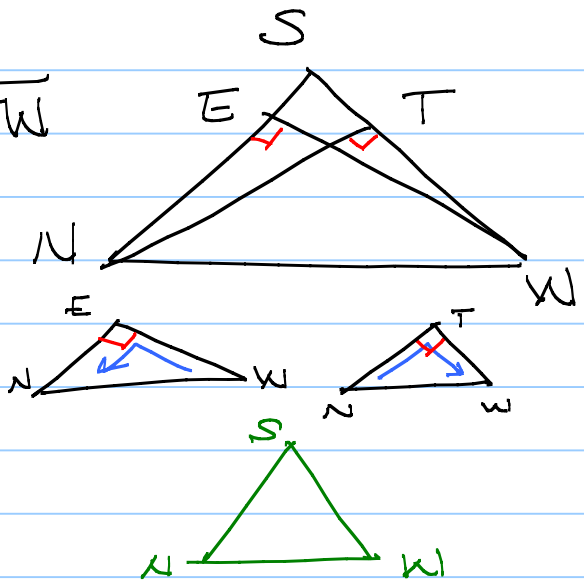
1. G: $\overline{BC} \perp \overline{AC}$, $\overline{BD} \perp \overline{AD}$, $\overline{AC} \cong \overline{AD}$
P: $\overrightarrow{AB}$ bis ∠CAD



	S	R
1.	$\overline{BC} \perp \overline{AC}$ & $\overline{BD} \perp \overline{AD}$	1. Given
RTLS 2.	∠ACB & ∠ADB right ∠s	2. ⊥ ⇒ right ∠s (1)
H 3.	$\overline{AB} \cong \overline{AB}$	3. Ref
L 4.	$\overline{AC} \cong \overline{AD}$	4. Given
5.	$\triangle ACB \cong \triangle ADB$	5. HL (2 3 4)
6.	∠CAB $\cong$ ∠DAB	6. CPCTC (5)
7.	$\overrightarrow{AB}$ bis ∠CAD	7. $\cong$ ∠s ⇒ bis

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

P: $\overline{SN} \cong \overline{SW}$



	S	R
	1. $\overline{WE} \perp \overline{SN}$ & $\overline{NT} \perp \overline{SW}$	1. GIVEN
RT∠	2. ∠NEW & ∠WTN	RT∠s 2. ⊥ ⇒ RT ∠s
H	3. $\overline{NW} \cong \overline{WN}$	3. REF
L	4. $\overline{EN} \cong \overline{TW}$	4. GIVEN
	5. $\triangle WEN \cong \triangle NTW$	5. HL (234)
	6. $\angle ENW \cong \angle TWN$	6. CPCTC
	7. $\overline{SN} \cong \overline{SW}$	7. △ ⇒ ☆