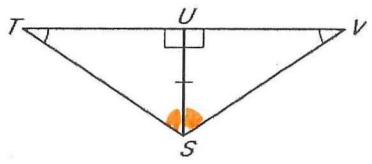
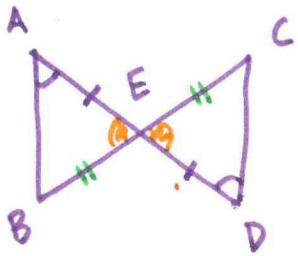
Section 4.6 Date

Use Congruent Triangles - CPCTC

Vocabulary	Definition	Example
CORRESPONDING PARTS OF CONGRUENT TRIANGLES ARE CONGRUENT (CPCTC)	If two triangles are congruent by SSS, SAS, HL, ASA or AAS, then the triangles' other corresponding sides and/or angles are congruent by (CPCTC).	Prove: $\angle TSU \cong \angle VSU$ 

Statements	Reasons
1. $\angle T \cong \angle V$	1. Given
2. $\angle TUS \cong \angle VUS$	2. Given
3. $\overline{SU} \cong \overline{SU}$	3. Given
4. $\Delta TUS \cong \Delta VUS$	4. AAS
5. $\angle TSU \cong \angle VSU$	5. CPCTC

* CPCTC is only used AFTER you prove that triangles are congruent.



Prove: $\overline{BE} \cong \overline{CE}$

Statements	Reasons
1. $\angle A \cong \angle D$	1. Given
2. $\overline{AE} \cong \overline{DE}$	2. Given
3. $\angle AEB \cong \angle DEC$	3. VA
4. $\Delta AEB \cong \Delta DEC$	4. ASA
5. $\overline{BE} \cong \overline{CE}$	5. CPCTC

NEVER use CPCTC to say that Δs are $\cong$