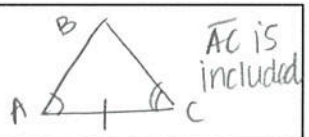
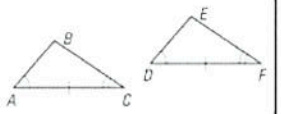
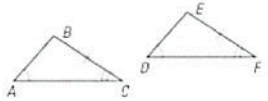
Name, Date, Hour:	Learning Target:	Homework:
Key	**4.5:** Prove △'S ≅ by ASA + AAS	Day 5

BOX 1

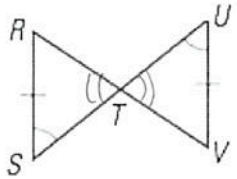
Included Side	the side between two ≅ angles	 $\overline{AC}$ is included
Angle-Side-Angle Congruence Postulate	if two ∠'s and an included side of one △ are ≅ to two ∠'s and an included side of another △ then the △'S are ≅	
Angle-Angle-Side Congruence Postulate	if two ∠'s and a non included side of one △ are ≅ to two ∠'s and a nonincluded side of another △ then the △'s are ≅	

BOX 2 - Identifying congruent triangles

Identify the congruence postulate you could use to show that the triangles are congruent. Then write the congruence statement.

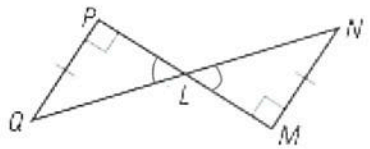
a. AAS

△RST ≅ △VUT



b. AAS

△LPQ ≅ △LMN

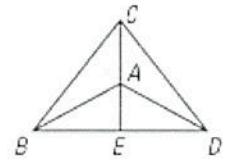


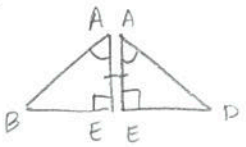
BOX 3 - Using ASA

~~∠CAB ≅ ∠CAD~~ ∠EAB ≅ ∠EAD

Given: CE ⊥ BD,

Prove: △ABE ≅ △ADE



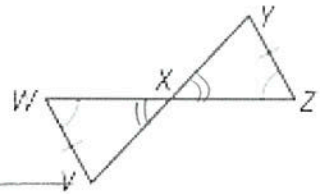


Statements	reasons
① CE ⊥ BD	① given
② ∠AEB & ∠AED are right	② Def of ⊥
③ ∠AEB ≅ ∠AED	③ Rt ∠ ≅ Thm
④ $\overline{AE} \cong \overline{AE}$	④ reflexive prop of ≅
⑤ △ABE ≅ △ADE	⑤ ASA

BOX 4 - Using AAS

Given: ∠W ≅ ∠Z, $\overline{VW} \cong \overline{YZ}$

Prove: △VWX ≅ △YZX



Statements	reasons
① ∠W ≅ ∠Z $\overline{VW} \cong \overline{YZ}$	① given
② ∠VXW ≅ ∠YXZ	② vertical ∠'s
③ △VWX ≅ △YZX	③ AAS