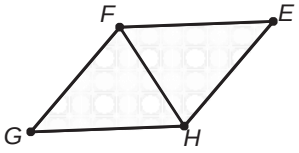
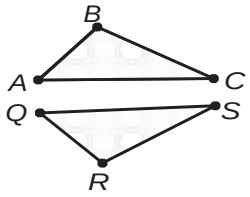
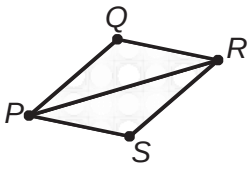
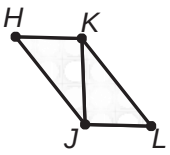
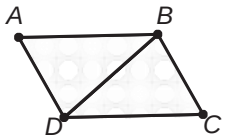
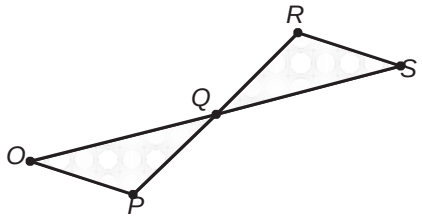
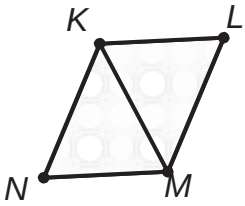
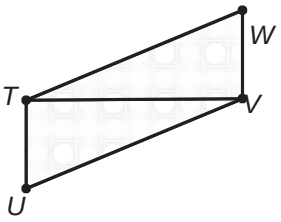
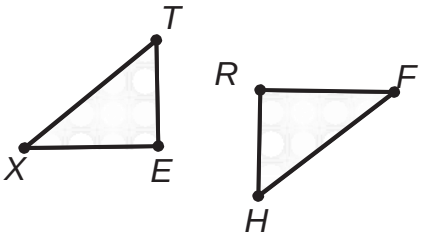
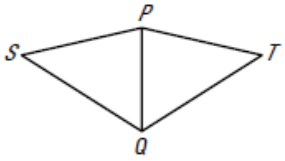
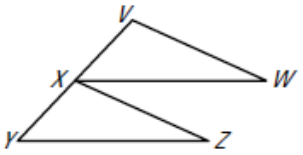
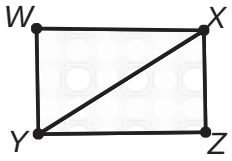
Decide whether the triangles are congruent. If so, write a congruence statement. Name_____
Name all postulates or theorems used to reach your conclusion. **Mark each triangle.**

1. $\overline{FE} \cong \overline{GH}, \angle EFH \cong \angle GHF$ 	2. $\angle A \cong \angle Q$, $\angle B \cong \angle R$, and $\overline{AC} \cong \overline{QS}$ 	3. $\angle QPR \cong \angle SRP$ and $\angle QRP \cong \angle SPR$ 
4. $\overline{HK} \cong \overline{JL}$ and $\overline{HJ} \cong \overline{KL}$ 	5. $\overline{AD} \cong \overline{BC}$, $\angle ABD \cong \angle CDB$ 	6. $\overline{OS}$ bisects $\overline{PR}$, $\overline{OP} \parallel \overline{RS}$ 
7. $\overline{KN} \parallel \overline{LM}$, $\overline{NM} \cong \overline{KL}$ 	8. $\overline{VW} \perp \overline{TV}$, $\overline{TU} \perp \overline{TV}$, $\overline{TW} \cong \overline{UV}$ 	9. $\angle E$ and $\angle R$ are right angles, $\overline{TE} \cong \overline{HR}$, $\overline{EX} \cong \overline{RF}$ 
10. $\overline{PQ}$ bisects $\angle SPT$, $\overline{SP} \cong \overline{TP}$ 	11. X is the midpt. of $\overline{VY}$; $\overline{XW} \parallel \overline{YZ}$, $\angle YXZ \cong \angle XVW$ 	12. $\overline{WX} \parallel \overline{YZ}$, $\angle W$ and $\angle Z$ are right angles 

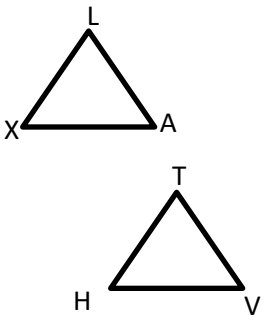
1. Are there any orders of sides and angles that DON'T prove triangles are congruent?

2. Circle which methods below COULD be used to prove two triangles are congruent?
   A. Prove all three corresponding angles are congruent.
   B. Prove that two angles and their included side are congruent.
   C. Prove all three corresponding sides are congruent.
   D. Prove two corresponding sides and one pair of corresponding angles are congruent.

Mark the triangles for 1-7.

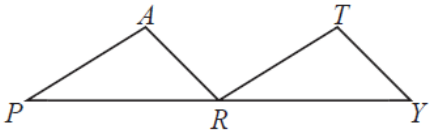
1) If you are given two triangles, ΔLAX and ΔTVH, where $\angle L \cong \angle T$ and $\overline{LA} \cong \overline{TV}$, what additional information would *not* be sufficient to prove $\Delta LAX \cong \Delta TVH$?

A. $\angle A \cong \angle V$
B. $\overline{LX} \cong \overline{TH}$
C. $\overline{AX} \cong \overline{VH}$
D. $\angle X$ and $\angle H$ are right angles



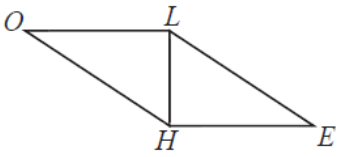
2) Given $\overline{PA} \parallel \overline{RT}$, $\overline{PA} \cong \overline{RT}$, R is the midpoint of $\overline{PY}$. Which theorem or postulate can be used to prove $\Delta PAR \cong \Delta RTY$?

A. ASA
B. HL
C. SSA
D. SAS



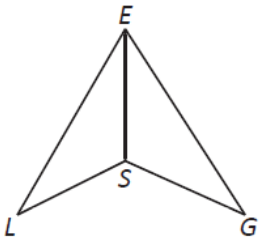
3) Given $\overline{HL} \perp \overline{OL}$ and $\overline{LH} \perp \overline{EH}$, and $\angle O \cong \angle E$. Which theorem or postulate can be used to prove $\Delta OHL \cong \Delta ELH$?

A. SSA
B. SAS
C. ASA
D. AAS



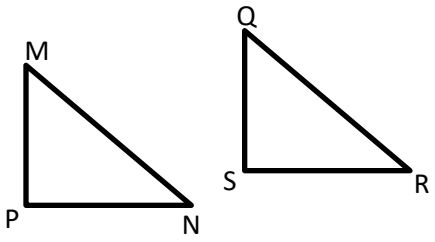
4) Given $\overline{SE}$ bisects $\angle LEG$ and $\overline{LE} \cong \overline{EG}$, choose the correct congruence statement.

A. $\Delta LES \cong \Delta ESG$
B. $\Delta SLE \cong \Delta GSE$
C. $\Delta SLE \cong \Delta ESG$
D. $\Delta ELS \cong \Delta EGS$



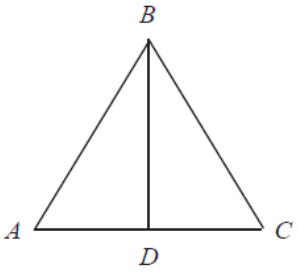
5) If you are given two triangles, ΔMNP and ΔQRS, where $\overline{MN} \cong \overline{QR}$ and $\overline{NP} \cong \overline{RS}$, what additional information would be sufficient to prove $\Delta NPM \cong \Delta RSQ$?

A. $\angle R \cong \angle P$
B. $\angle S$ and $\angle P$ are right angles
C. $\overline{MN} \cong \overline{QS}$
D. $\angle M \cong \angle Q$



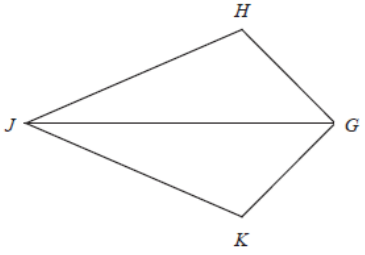
6) If ΔABD and ΔCBD are right triangles and $\overline{AB} \cong \overline{BC}$, what theorem or postulate proves $\Delta ABD \cong \Delta CBD$?

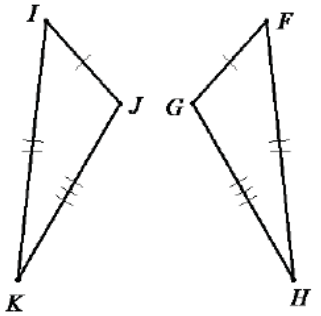
A. HL
B. SAS
C. SSS
D. ASA



7) If $\overline{HG} \cong \overline{KG}$ and $\angle HGJ \cong \angle KGJ$, which congruence postulate or theorem would prove ΔGHJ≅ΔGKJ? ?

A. SAS
B. SSS
C. HL
D. AAS



8) Choose the correct congruency statement given the triangles below.

a. $\Delta HFG \cong \Delta KIJ$
b. $\Delta GHF \cong \Delta KJI$
c. $\Delta GHF \cong \Delta KIJ$
d. $\Delta FGH \cong \Delta KJI$