

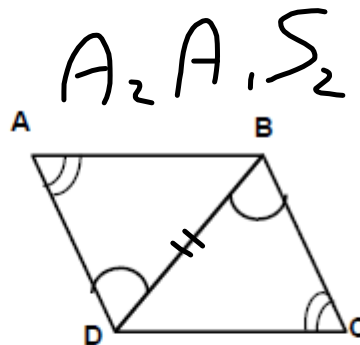
$A_2 A_1 S_1$

$A_2 A_1 S_1$

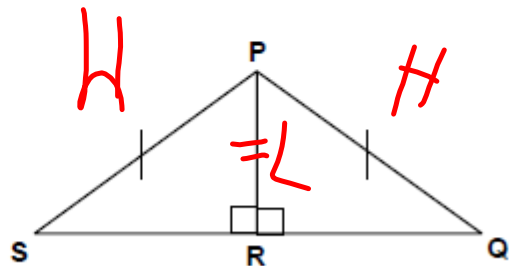
AAS  $\triangle ABC \cong \triangle DEF$

QUICK CHECK:

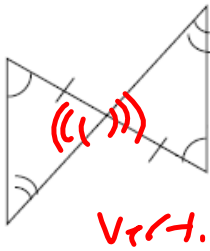
- a)  $\angle A \cong \angle C$   
 $\angle ADB \cong \angle CBD$   
 $\overline{DB} \cong \overline{DB}$   
 b) \_\_\_\_\_  
 c)  $\triangle ADB \cong \triangle CBD$



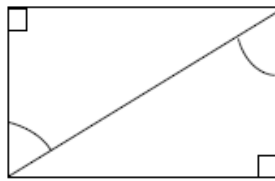
- a) \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_ are right triangles.  
 b)  $HL$   
 c)  $\triangle SRP \cong \triangle QRP$



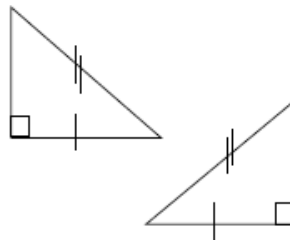
a)



b)



c)

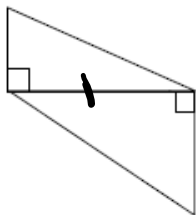


SAS AAS  
ASA

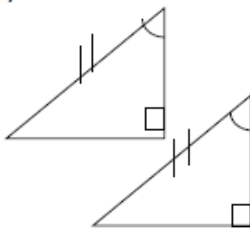
QUICK CHECK:

Which postulate (if any) should be used to show that the triangles are congruent?

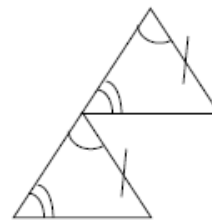
a)



b)



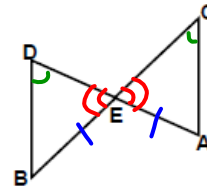
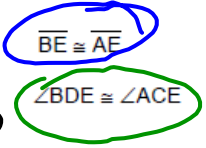
c)



EXAMPLE 3: In each example, mark the drawing to show the given information and fill in the blanks.

$\triangle DEB \cong \triangle CEA$

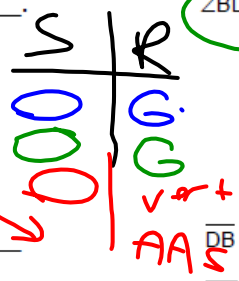
by \_\_\_\_\_.



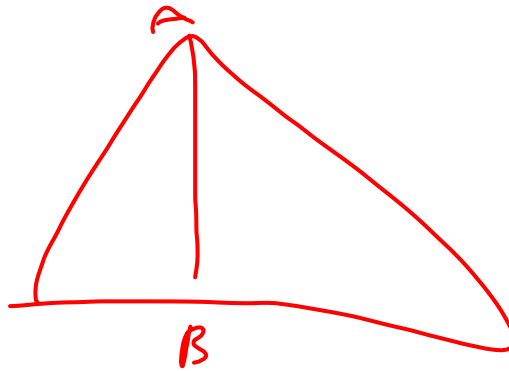
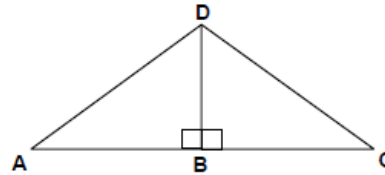
QUICK CHECK:

$\triangle DBA \cong \triangle$  \_\_\_\_\_

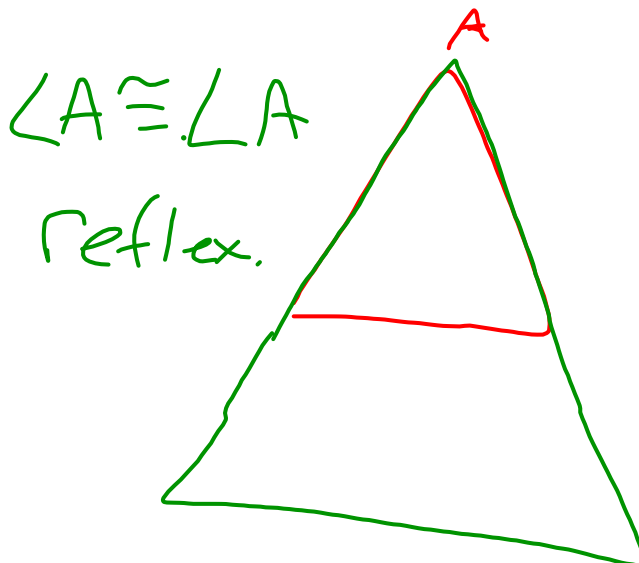
by \_\_\_\_\_.



$\overline{DB} \perp \overline{AC}$   
 $\overline{AD} \cong \overline{CD}$

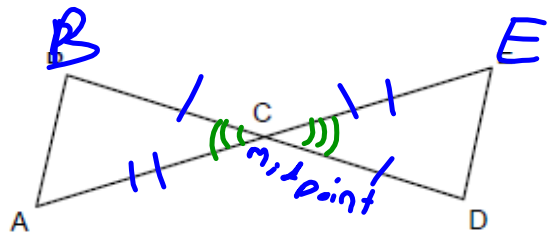


reflex.  $\overline{AB} \cong \overline{AB}$



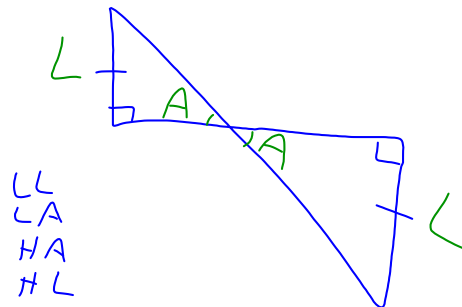
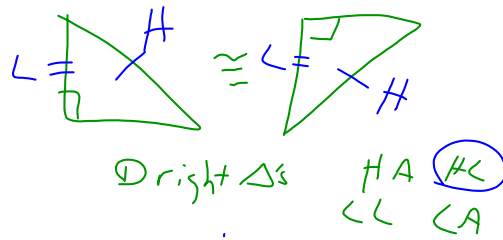
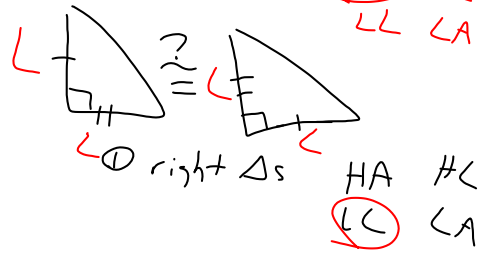
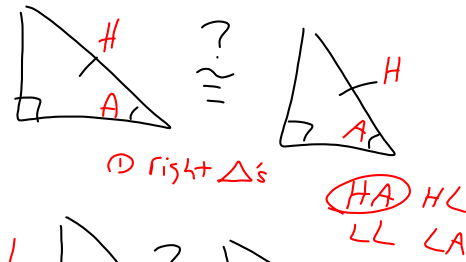
**EXAMPLE 2:** Given: C is the midpoint of  $\overline{AE}$ ;  
C is the midpoint of  $\overline{BD}$ .

Prove:  $\triangle ABC \cong \triangle EDC$



STATEMENTS	REASONS
1. C is mid. BD	1. Given
2. C is the midpoint of $\overline{AE}$	2. Given
3. $\overline{BC} \cong \overline{DC}$	3. Definition of a <u>midpoint</u>
4. $\overline{AC} \cong \overline{CE}$	4. Definition of a Midpoint
5. $\angle BCA \cong \angle DCE$	5. Definition of Vertical Angles
<b>SAS</b>	

$\triangle ABC \cong \triangle EDC \rightarrow$



which segment is hyp.

make right  $\angle$  into arrow, it points to hyp.

