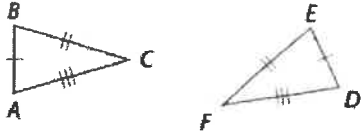
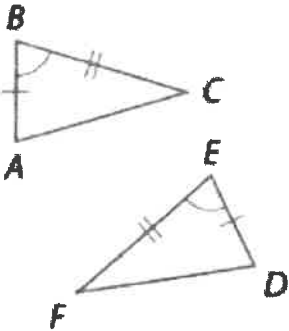
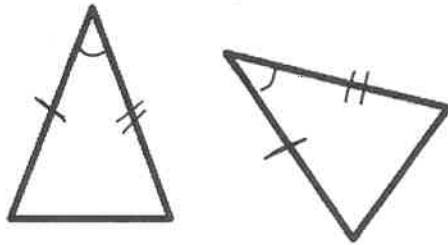
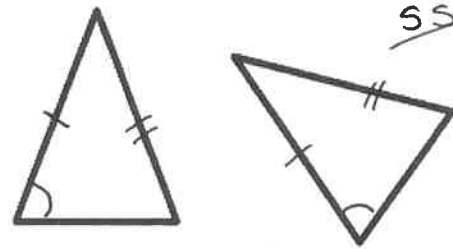


<p><u>Side-Side-Side Congruence (SSS)</u></p>	<p>If three sides of one triangle are congruent to three sides of a second triangle, then the triangles are congruent.</p>	
<p><u>Side-Angle-Side Congruence (SAS)</u></p>	<p>If two sides and the <u>included angle</u> of one triangles are congruent to two sides and the <u>included angle</u> of a second triangle, then the triangles are congruent.</p>	

SAS:

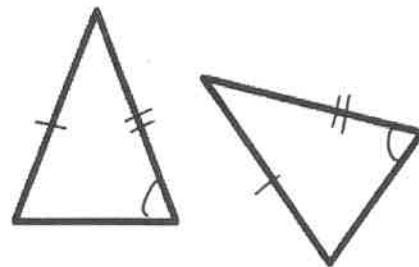


NOT SAS:



Donkey thm

~~SSA~~



1. State the included angle of the following sides of the given triangle:

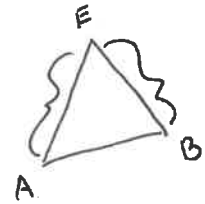
a.  $\triangle AEB$

i.  $\overline{AE}$  and  $\overline{EB}$

$\angle E$

ii.  $\overline{AB}$  and  $\overline{EB}$

$\angle B$



b.  $\triangle MNO$

i.  $\overline{MN}$  and  $\overline{ON}$

$\angle N$

ii.  $\overline{MO}$  and  $\overline{ON}$

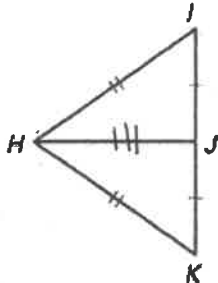
$\angle O$



2. Decide whether there is enough information given to prove if the triangles are congruent.

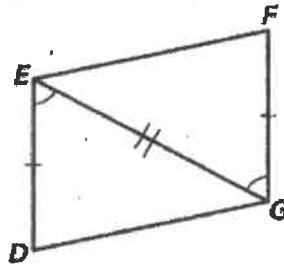
$\triangle IHJ \cong \triangle JHK$

SSS



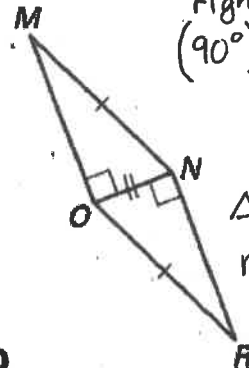
$\triangle DEG, \triangle FGE$

SAS



$\triangle MNO, \triangle RON$

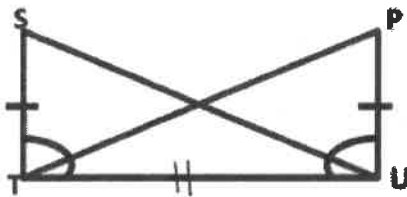
right angles ( $90^\circ$ ) are  $\cong$



$\Delta$ s are not congruent

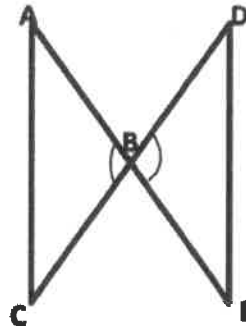
$\triangle STU, \triangle PUT$

SAS



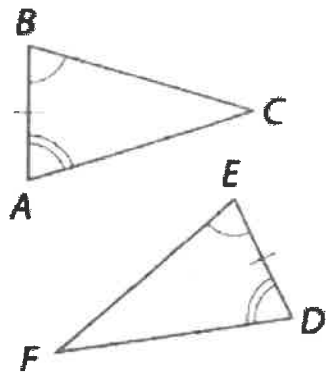
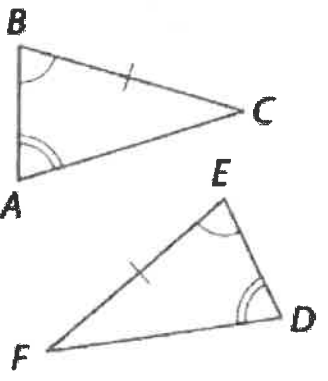
$\triangle ABC, \triangle EBD$

Not congruent

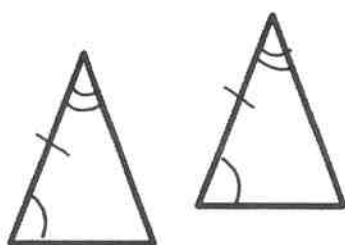


Keep in mind:

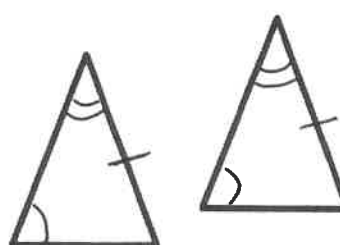
- vertical angles are congruent
- shared side  $\rightarrow$  congruent

<p>Angle-Side-Angle Congruence (ASA)</p>	<p>If two angles and the included side of one triangle are congruent to two angles and the included side of another triangle, then the triangles are congruent.</p>	
<p>Angle-Angle-Side Congruence (AAS)</p>	<p>If two angles and the nonincluded side of one triangle are congruent to the corresponding two angles and side of a second triangle, then the triangles are congruent.</p>	

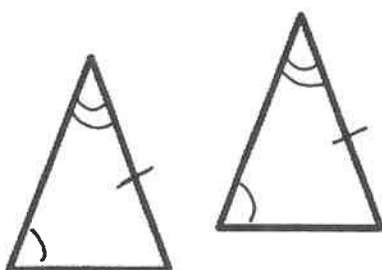
ASA



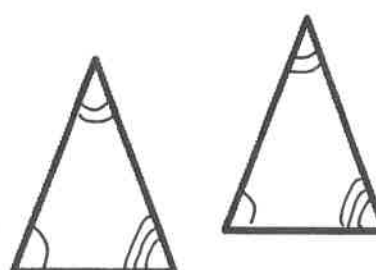
NOT ASA



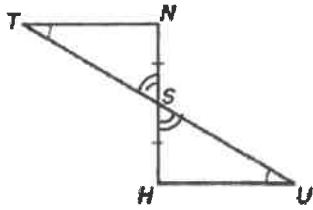
AAS



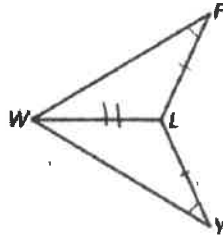
NOT AAS



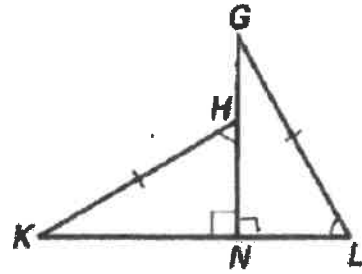
1. Is it possible to prove the triangles are congruent? If so, state the postulate of theorem you would use?



AAS

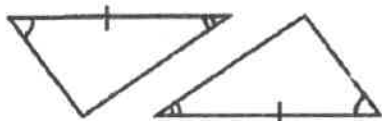


not congruent

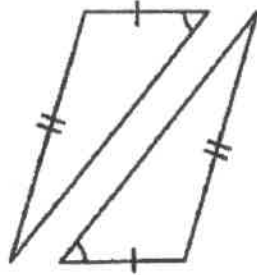


AAS

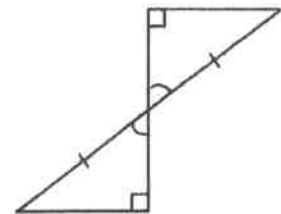
2. Identify which property will prove the triangles below congruent.



ASA



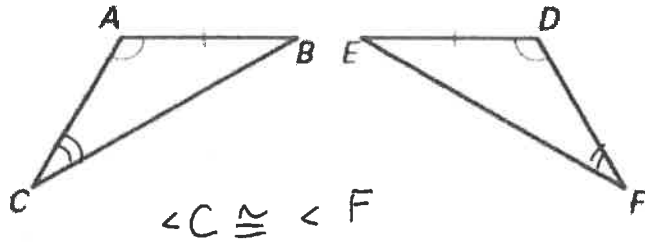
not congruent



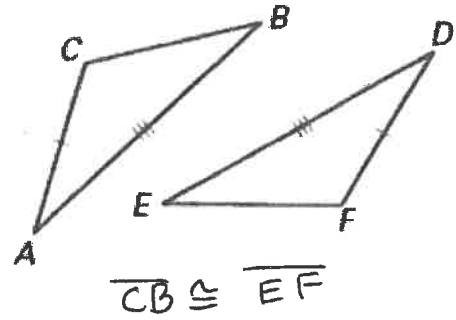
AAS

3. State the third corresponding part that will make the triangles below congruent using the congruence postulate given.

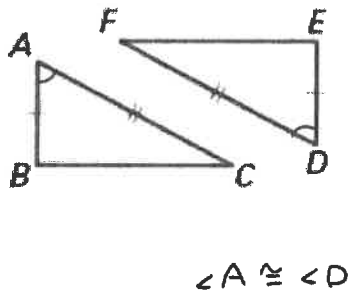
AAS Congruence Theorem



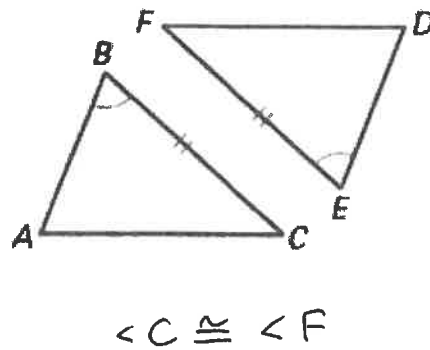
SSS Congruence Postulate



SAS Congruence Postulate

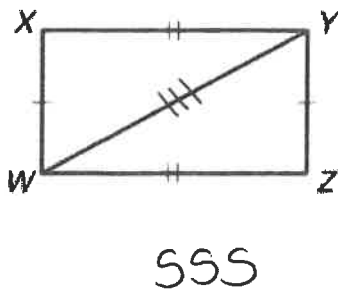


ASA Congruence Postulate

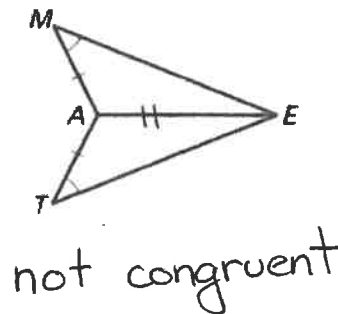


4. Decide whether there is enough information given to state the triangles congruent:

$\triangle XYW, \triangle ZWY$



$\triangle MAE, \triangle TAE$



$\triangle DKA, \triangle TKS$

