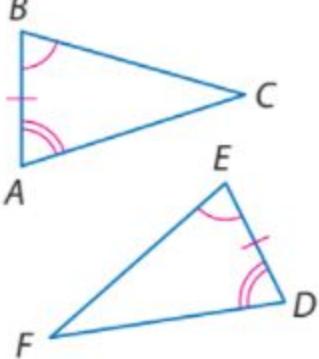
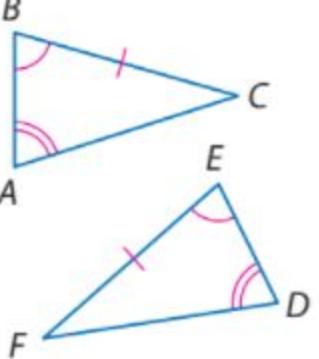
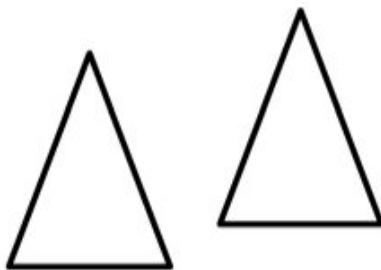


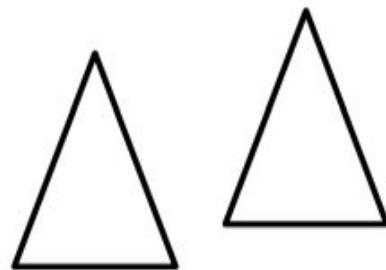
Geometry CP  
 4.5 Proving Triangles Congruent  
 (AAS, ASA, HL)

<b>Angle-Side-Angle Congruence (ASA)</b>	<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>	
<b>Angle-Angle-Side Congruence (AAS)</b>	<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

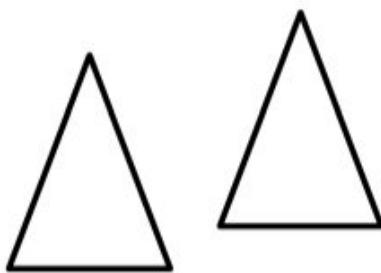


NOT ASA

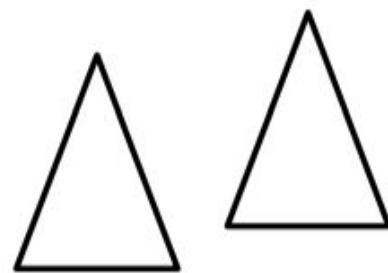


Geometry CP  
 4.5 Proving Triangles Congruent  
 (AAS, ASA, HL)

AAS

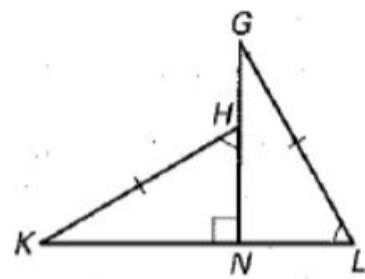
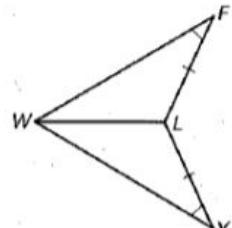
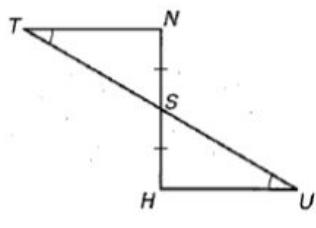


NOT AAS



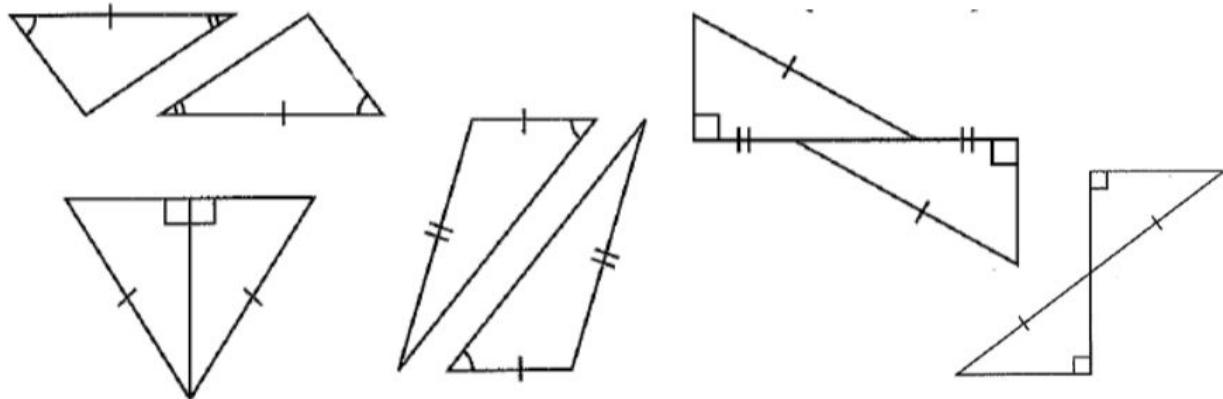
Hypotenuse-Leg Congruence (HL)	If the hypotenuse and a leg of one right triangle are congruent to the hypotenuse and corresponding leg of another triangle, then the triangles are congruent	
--------------------------------	---	--

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



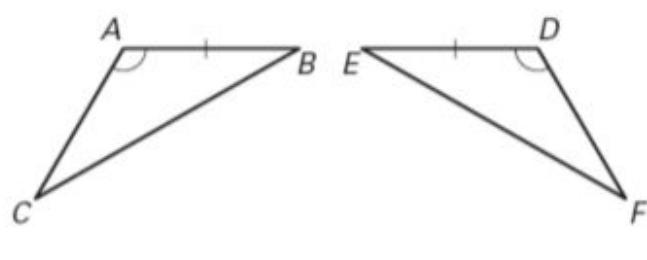
Geometry CP  
 4.5 Proving Triangles Congruent  
 (AAS, ASA, HL)

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

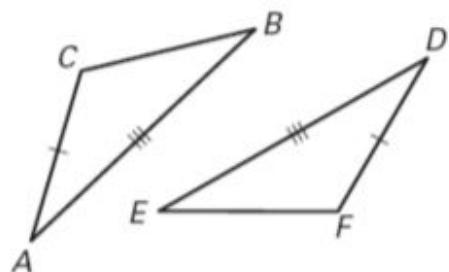


3. State the third corresponding part that will make the triangles below congruent using the congruence postulate given.

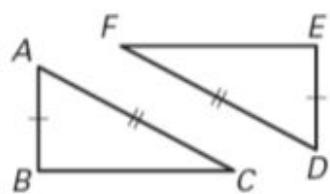
AAS Congruence Theorem



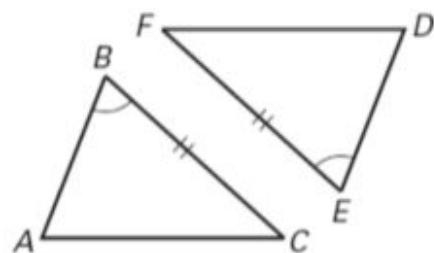
SSS Congruence Postulate



SAS Congruence Postulate



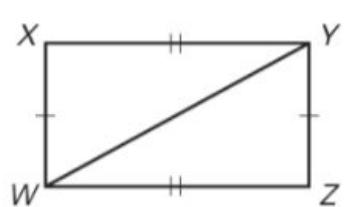
ASA Congruence Postulate



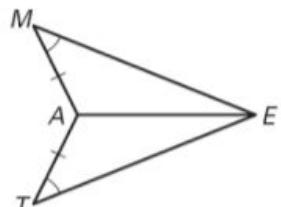
Geometry CP  
 4.5 Proving Triangles Congruent  
 (AAS, ASA, HL)

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

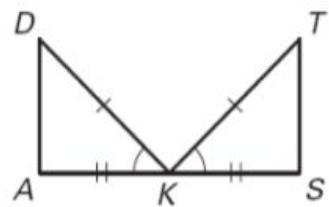
$\Delta XYW, \Delta ZYW$



$\Delta MAE, \Delta TAE$



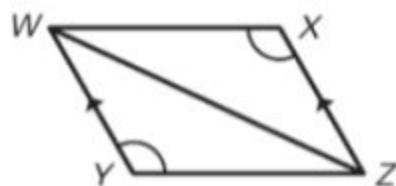
$\Delta DKA, \Delta TKS$



5.

Given:  $\overline{WY} \parallel \overline{ZX}$   
 $\angle Y \cong \angle X$

Prove:  $\triangle WYZ \cong \triangle ZXW$



Statements

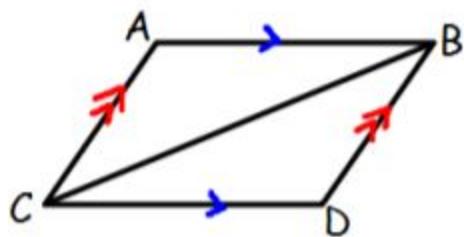
Reasons

Geometry CP  
4.5 Proving Triangles Congruent  
(AAS, ASA, HL)

6.

Given:  $\overline{AB} \parallel \overline{DC}$   
 $\overline{AC} \parallel \overline{DB}$

Prove:  $\triangle ABC \cong \triangle DCB$



Statements

Reasons

Geometry CP  
4.5 Proving Triangles Congruent  
(AAS, ASA, HL)

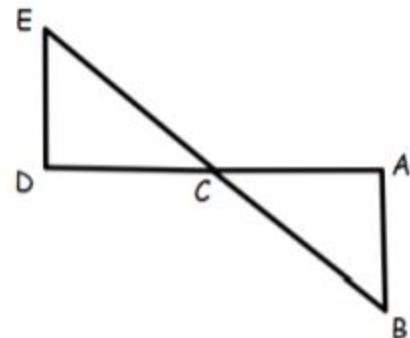
7.

Given:  $\overline{AB} \perp \overline{AD}$

$\overline{DE} \perp \overline{AD}$

C is the midpoint of  $\overline{BE}$

Prove:  $\triangle ABC \cong \triangle DEC$



Statements	Reasons