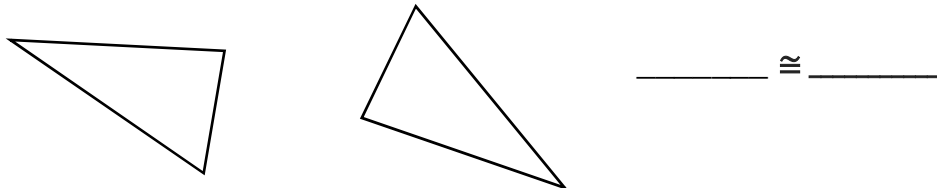


### Triangle Congruence

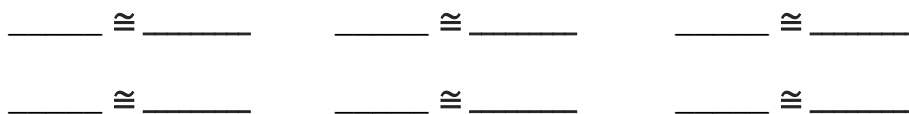
#### Congruent Triangles

- Congruent triangles have \_\_\_\_\_ and \_\_\_\_\_.
- The parts of congruent triangles that “match” are called \_\_\_\_\_.

**In a congruence statement, \_\_\_\_\_ !!!!**

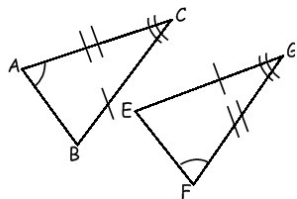


**CPCTC:** \_\_\_\_\_

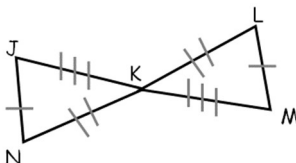


**Examples:** Complete the congruence statement.

1.  $\triangle BCA \cong \triangle \underline{\hspace{1cm}}$   
 $\triangle \underline{\hspace{1cm}} \cong \triangle GFE$



2.  $\triangle \underline{\hspace{1cm}} \cong \triangle JKN$



3. If  $\triangle ABC \cong \triangle DEF$ ,  
 then  $\angle C \cong \underline{\hspace{1cm}}$

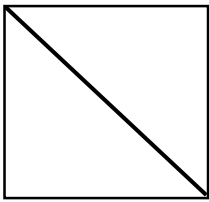
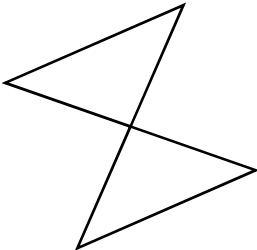
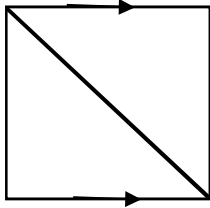
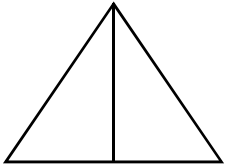
4. If  $\triangle CAT \cong \triangle DOG$ ,  
 then  $AC \cong \underline{\hspace{1cm}}$

#### Five Ways to Prove Triangles Are Congruent

_____	_____	_____	_____	_____
-------	-------	-------	-------	-------

**What DOESN'T WORK?**

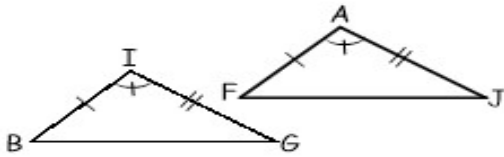
**Four Markings YOU can add if they aren't already marked:**

<p>If they share a side, we call it _____.</p> 	<p>If you see _____, you can mark them.</p> 	<p>Look for _____.</p> 	<p>If two triangles make up an _____, then mark _____ and _____.</p> 
--	---	---	--

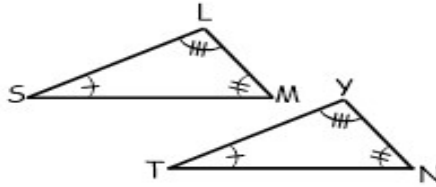
**Practice**

Determine if each pair of triangles is congruent by *SSS*, *SAS*, *ASA*, *HL*, or *AAS* and finish the congruence statement. If none of these methods work based on the information given, write "none" and write X on the statement blank.

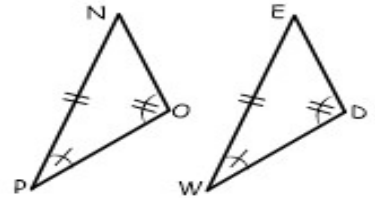
1. \_\_\_\_\_  
 $\triangle BIG \cong$  \_\_\_\_\_



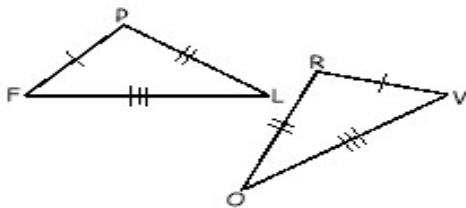
2. \_\_\_\_\_  
 $\triangle SML \cong$  \_\_\_\_\_



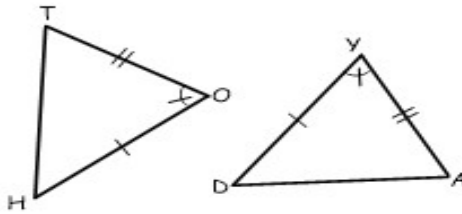
3. \_\_\_\_\_  
 $\triangle OPN \cong$  \_\_\_\_\_



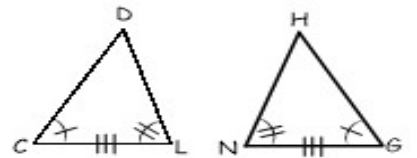
4. \_\_\_\_\_  
 $\triangle FLP \cong$  \_\_\_\_\_



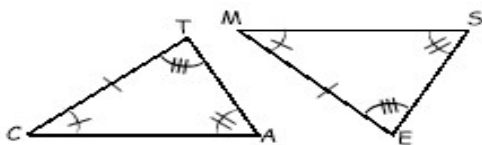
5. \_\_\_\_\_  
 $\triangle HOT \cong$  \_\_\_\_\_



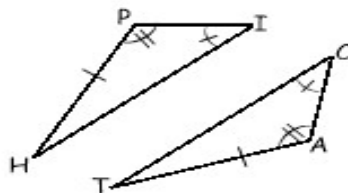
6. \_\_\_\_\_  
 $\triangle CLD \cong$  \_\_\_\_\_



7. \_\_\_\_\_  
 $\triangle CAT \cong$  \_\_\_\_\_



8. \_\_\_\_\_  
 $\triangle HIP \cong$  \_\_\_\_\_



9. \_\_\_\_\_  
 $\triangle PAT \cong$  \_\_\_\_\_

