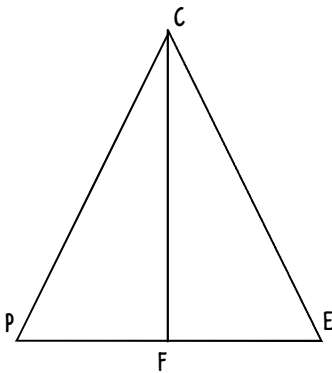


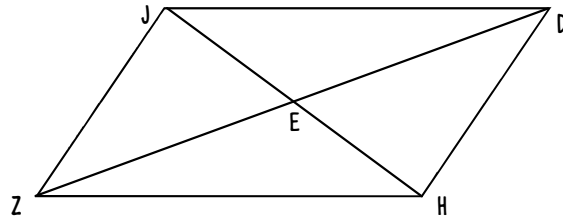
# TRIANGLE CONGRUENCY INTRO

We know that if triangles are congruent, all six parts of one triangle are congruent to all six parts of the second triangle. We can also determine that two triangles are congruent with less information using these postulates & theorems.

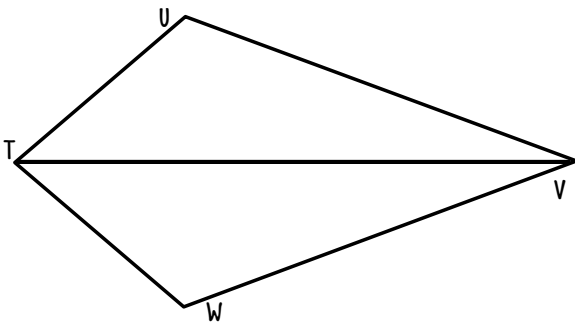
**SIDE-SIDE-SIDE congruence postulate**



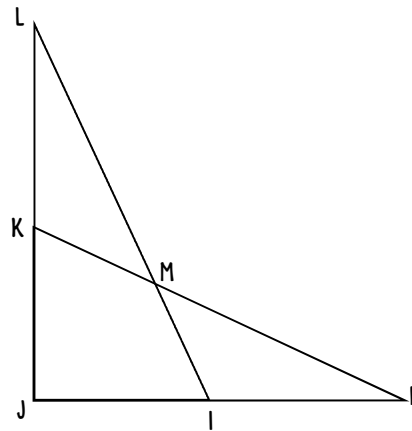
**SIDE-ANGLE-SIDE congruence postulate**



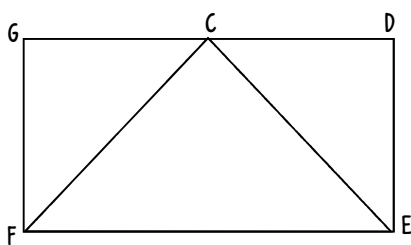
**ANGLE-SIDE-ANGLE congruence postulate**



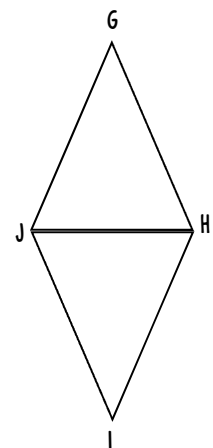
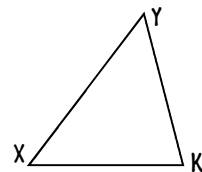
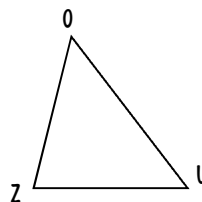
**ANGLE-ANGLE-SIDE congruence theorem**



**HYPOTENUSE-LEG congruence theorem**



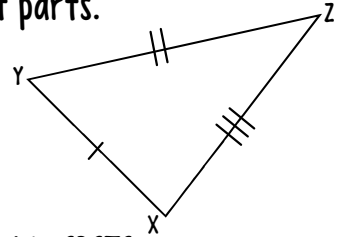
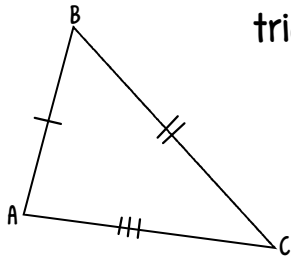
**NO-NOs**



# PROVING TRIANGLES CONGRUENT

triangle congruence statements identify the pairs of congruent parts.

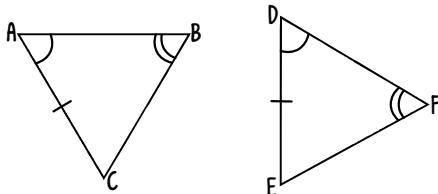
given  $\triangle ABC \cong \triangle XYZ$



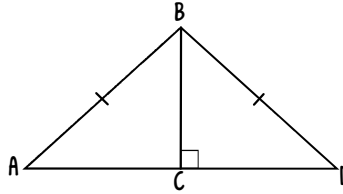
angles	sides
--------	-------

corresponding parts of congruent triangles are congruent can be shortened to CPCTC

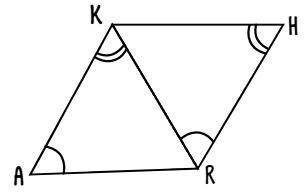
for each pair of triangles below a) determine if congruent  
if so... b) give the proving postulate or theorem c) give the triangle congruence statement



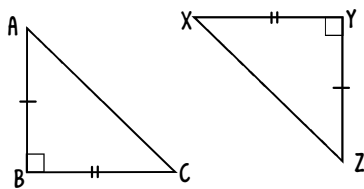
congruent?	yes	no
reason		
$\triangle \text{---} \cong \triangle \text{---}$		



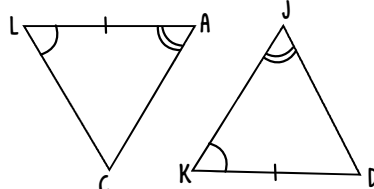
congruent?	yes	no
reason		
$\triangle \text{---} \cong \triangle \text{---}$		



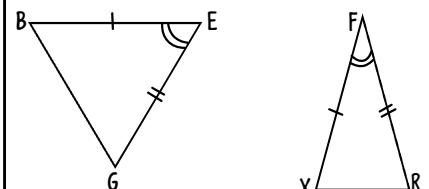
congruent?	yes	no
reason		
$\triangle \text{---} \cong \triangle \text{---}$		



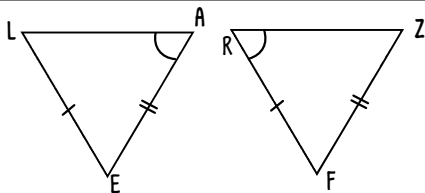
congruent?	yes	no
reason		
$\triangle \text{---} \cong \triangle \text{---}$		



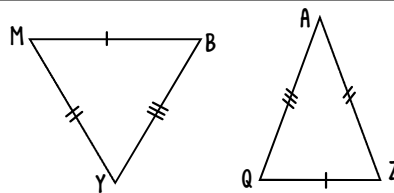
congruent?	yes	no
reason		
$\triangle \text{---} \cong \triangle \text{---}$		



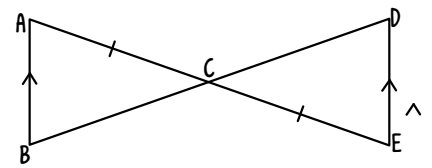
congruent?	yes	no
reason		
$\triangle \text{---} \cong \triangle \text{---}$		



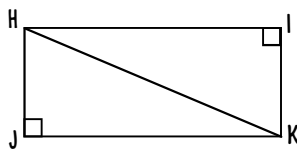
congruent?	yes	no
reason		
$\triangle \text{---} \cong \triangle \text{---}$		



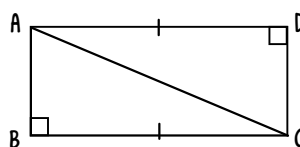
congruent?	yes	no
reason		
$\triangle \text{---} \cong \triangle \text{---}$		



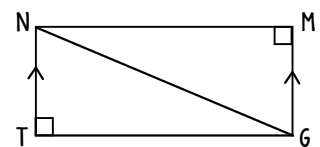
congruent?	yes	no
reason		
$\triangle \text{---} \cong \triangle \text{---}$		



congruent?	yes	no
reason		
$\triangle \text{---} \cong \triangle \text{---}$		



congruent?	yes	no
reason		
$\triangle \text{---} \cong \triangle \text{---}$		



congruent?	yes	no
reason		
$\triangle \text{---} \cong \triangle \text{---}$		