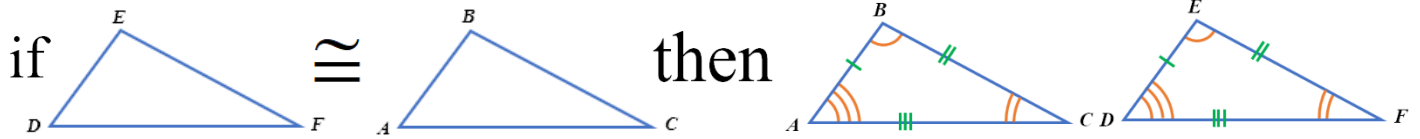


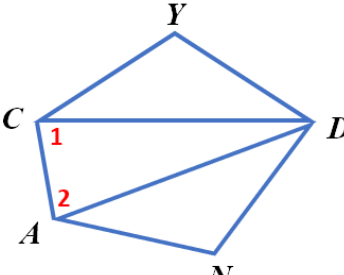
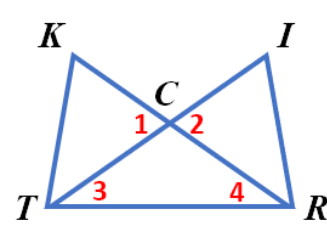
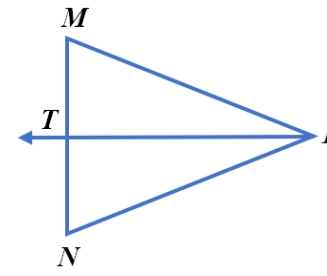
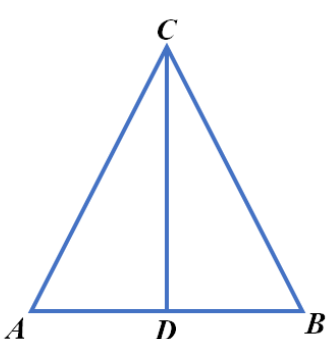
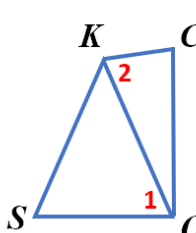
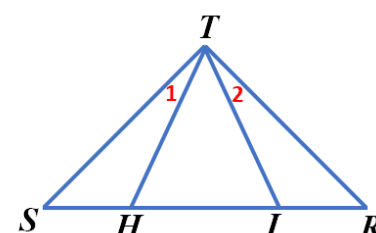
If \triangle 's \cong then all corresponding parts \cong .



For every proof:

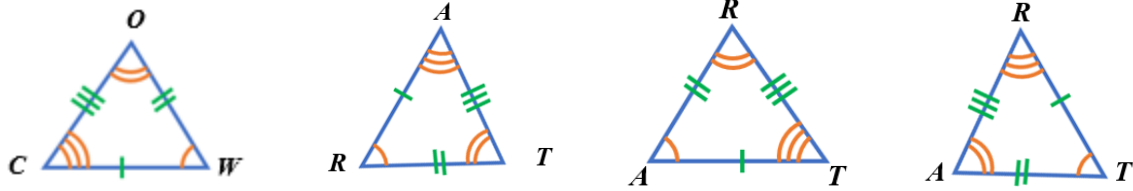
- Copy the diagram, the given and the prove onto your paper.
- Setup the statements and reasons columns.
- Write the givens and add geometric markings to your drawing.
- Finish the proof giving statements and reasons.



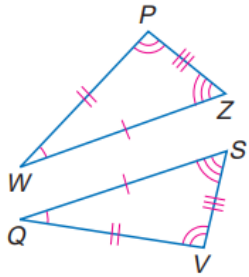
<p>1. Given: $\overline{CY} \cong \overline{AN}$; $\angle Y \cong \angle N$ $\overline{YD} \cong \overline{DN}$ Prove: $\angle 1 \cong \angle 2$</p> 	<p>2. Given: $\angle 3 \cong \angle 4$ $\overline{KC} \cong \overline{CI}$ Prove: $\angle K \cong \angle I$</p> 	<p>3. Given: \overline{TI} bisects $\angle MIN$ $\overline{MN} \perp \overline{TI}$ Prove: $\triangle MIN$ is isosceles</p> 
<p>4. Given: $\overline{AC} \cong \overline{BC}$; M is the midpoint of \overline{AB} Prove: $\angle CDA \cong \angle CDB$</p> 	<p>5. Given: $\angle 1 \cong \angle S$; $\angle C \cong \angle 2$ Prove: $\overline{SK} \cong \overline{OC}$</p> 	<p>6. Given: $\angle S \cong \angle R$; $\angle 1 \cong \angle 2$ Prove: $\triangle HIT$ is isosceles</p> 

Review:

7. Which $\triangle COW$ is congruent to $\triangle RAT$? Note: All four triangles are congruent, but only one of the $\triangle RAT$'s has the letters arranged so the corresponding parts are congruent. Circle the correct \triangle .



8. Complete the congruence statements for the diagram shown.



$\triangle ZWP \cong \triangle \underline{\hspace{1cm}} \underline{\hspace{1cm}} \underline{\hspace{1cm}}$

$\triangle SVQ \cong \triangle \underline{\hspace{1cm}} \underline{\hspace{1cm}} \underline{\hspace{1cm}}$

$\triangle PZW \cong \triangle \underline{\hspace{1cm}} \underline{\hspace{1cm}} \underline{\hspace{1cm}}$

9. Use the triangle congruence statement to write 6 congruence statements.

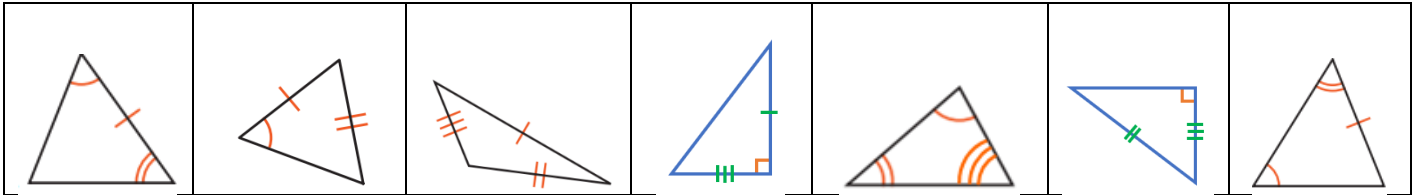
If $\triangle SIT \cong \triangle PAW$ then

$\underline{\hspace{1cm}} \cong \underline{\hspace{1cm}} \quad \underline{\hspace{1cm}} \cong \underline{\hspace{1cm}}$

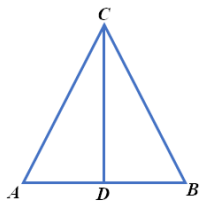
$\underline{\hspace{1cm}} \cong \underline{\hspace{1cm}} \quad \underline{\hspace{1cm}} \cong \underline{\hspace{1cm}}$

$\underline{\hspace{1cm}} \cong \underline{\hspace{1cm}} \quad \underline{\hspace{1cm}} \cong \underline{\hspace{1cm}}$

10. Write the correct code for each \triangle . Choose from AAA, SSA, HL, ASA, AAS, SAS, SSS.

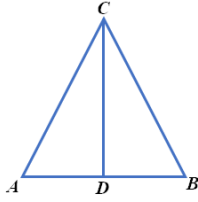


11. Mark the diagram:
 D is the midpoint of \overline{AB}



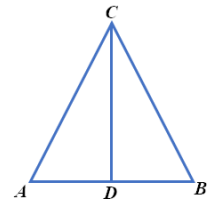
so $\underline{\hspace{1cm}} \cong \underline{\hspace{1cm}}$

12. Mark the diagram:
 \overline{CD} bisects $\angle ACB$



so $\underline{\hspace{1cm}} \cong \underline{\hspace{1cm}}$

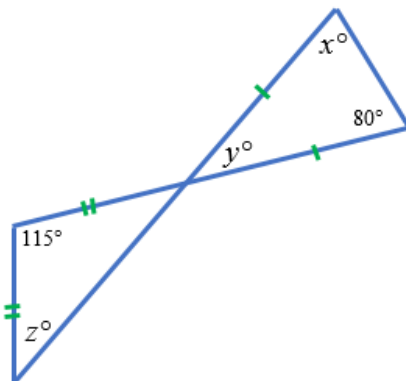
13. Mark the diagram:
 $\overline{AB} \perp \overline{CD}$



so $\angle \underline{\hspace{1cm}}$ and $\angle \underline{\hspace{1cm}}$ are right \angle 's

so $\angle \underline{\hspace{1cm}} \cong \angle \underline{\hspace{1cm}}$

14. Find the value of each variable.



15. Write and solve a system to find x and y .

