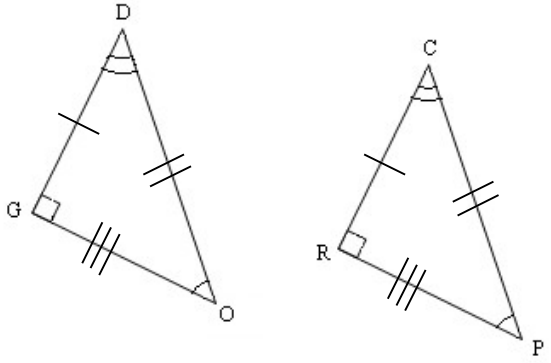
Name _____ Period ____

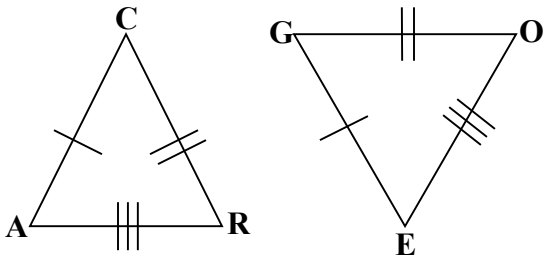
UNIT #2: TRIANGLE CONGRUENCE AND CPCTC

I. Write the congruence statement for each pair of triangles.

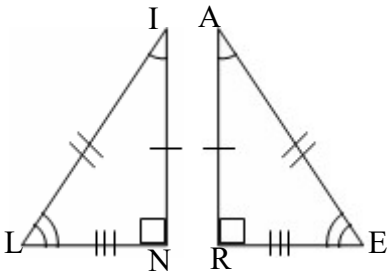
1. $\triangle OGD \cong \triangle$_____



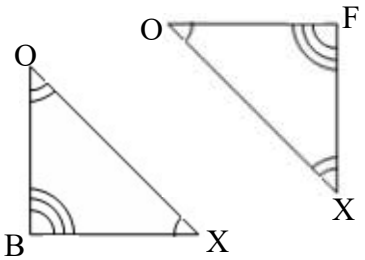
2. $\triangle RAC \cong \triangle$_____



3. $\triangle LIN \cong \triangle$_____

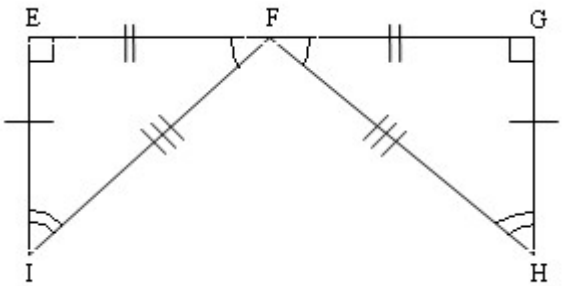


4. $\triangle FOX \cong \triangle$_____



II. Name the congruent triangle and the congruent parts.

7.



$\triangle FGH \cong \triangle$_____

$\measuredangle EFI \cong \measuredangle$ _____ $\overline{FG} \cong$ _____

$\measuredangle G \cong \measuredangle$ _____ $\overline{GH} \cong$ _____

$\measuredangle H \cong \measuredangle$ _____ $\overline{FH} \cong$ _____

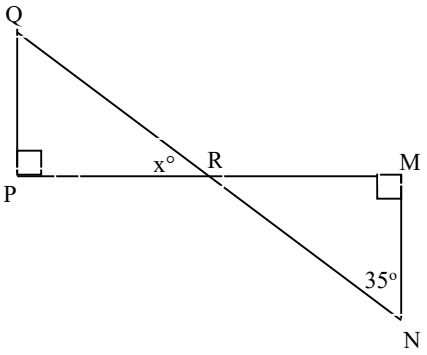
Use the congruency statement to fill in the corresponding congruent parts.

8. $\triangle EFI \cong \triangle HGI$ $\measuredangle E \cong \measuredangle$ _____ $\overline{FE} \cong$ _____ $\measuredangle EFI \cong \measuredangle$ _____

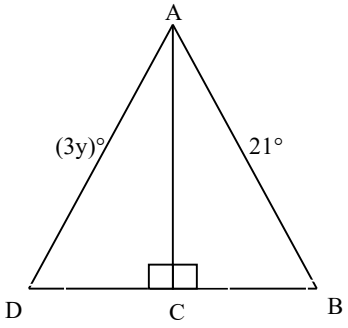
$\overline{FI} \cong$ _____ $\measuredangle FIE \cong \measuredangle$ _____ $\overline{IE} \cong$ _____

III. Knowing the following triangles are congruent, find the missing variable.

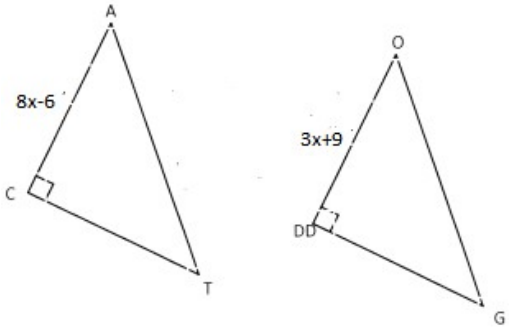
9. $\triangle PQR \cong \triangle MNR$. Find x.



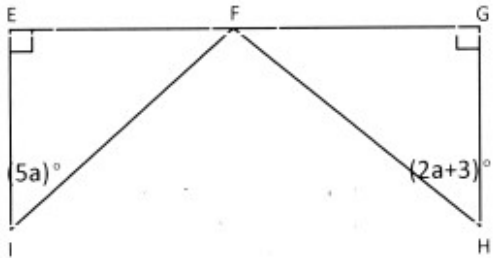
10. $\triangle ABC \cong \triangle ADC$. Find y.



11. $\triangle CAT \cong \triangle DOG$. Find x.

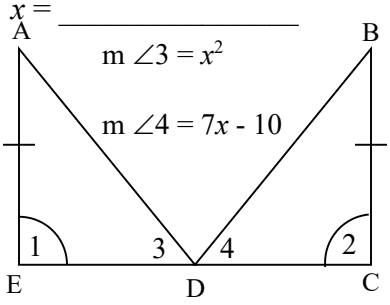


12. $\triangle IEF \cong \triangle HGF$. Find a.

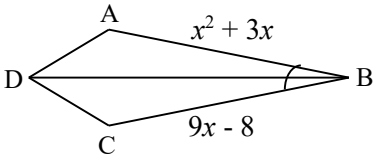


IV. *Challenge*: For which value(s) of *x* are the triangles congruent?

13. $x =$ _____



14. $x =$ _____



15. $x =$ _____