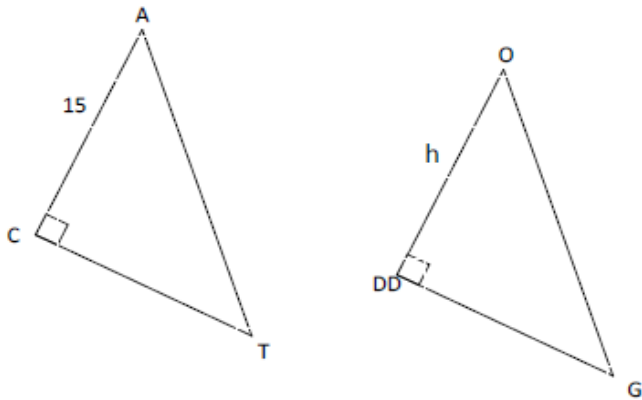


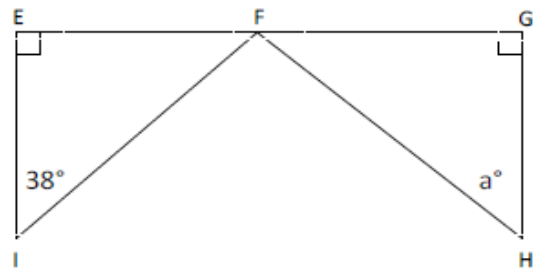
14.3 CPCTC

I. Solve for the variable.

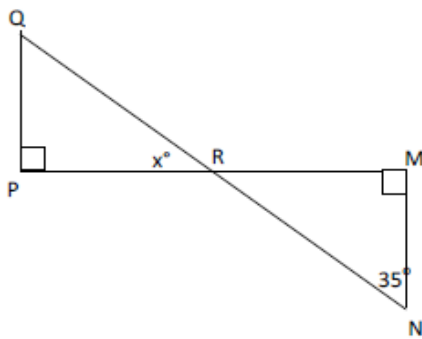
1. $\triangle CAT \cong \triangle DOG$. Find h .



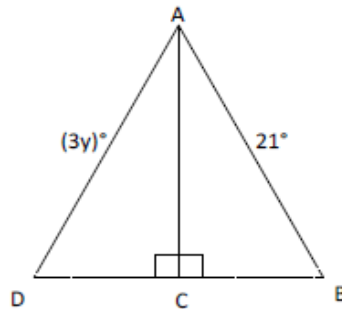
2. $\triangle IEF \cong \triangle HGF$. Find a .



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

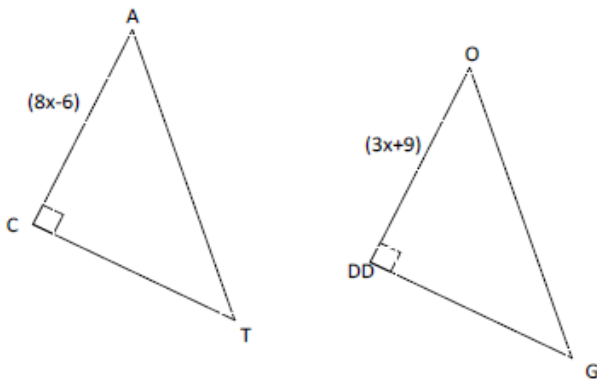


4. $\triangle ABC \cong \triangle ADC$. Find y .

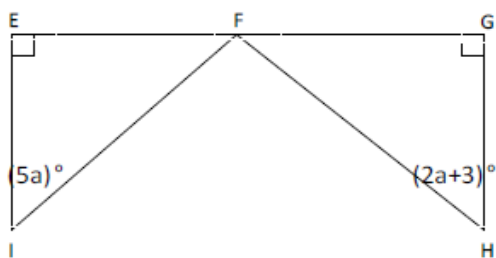


II. Set up an equation and then solve for the variable.

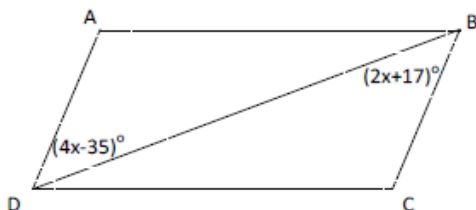
5. $\triangle CAT \cong \triangle DOG$. Find x .



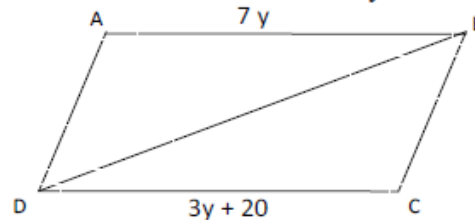
6. $\triangle IEF \cong \triangle HGF$. Find a .



7. $\triangle ABD \cong \triangle CDB$. Find x .

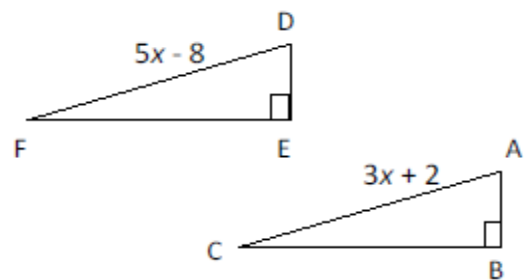


8. $\triangle ABD \cong \triangle CDB$. Find y .

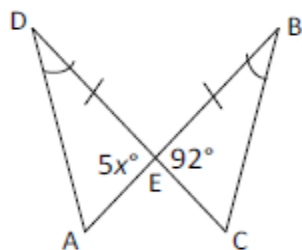


III. For which value(s) of x are the triangles congruent?

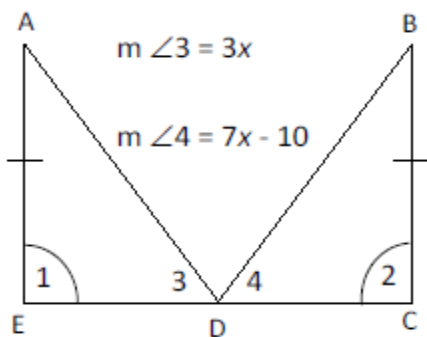
9. $x =$ _____



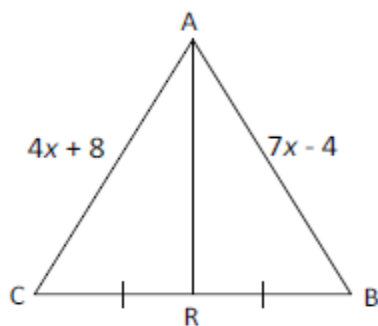
10. $x =$ _____



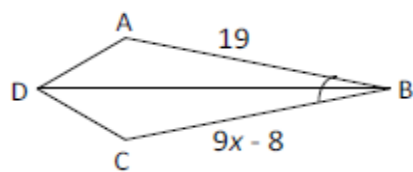
11. $x =$ _____



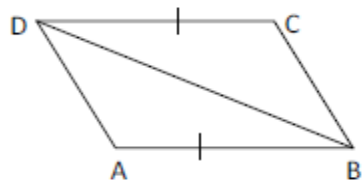
12. $x =$ _____



13. $x =$ _____

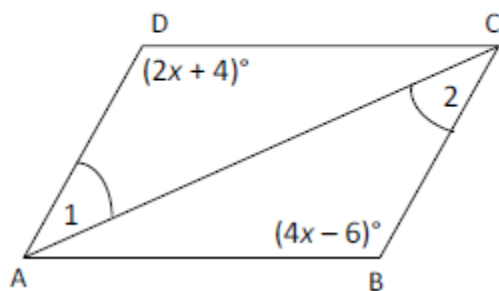


14. $x =$ _____

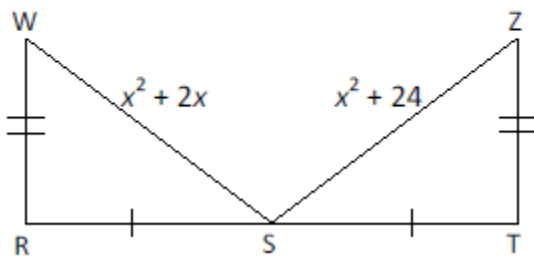


$m\angle CDB = (15x + 3)^\circ$ $m\angle ABD = (10x + 18)^\circ$

15. $x =$ _____

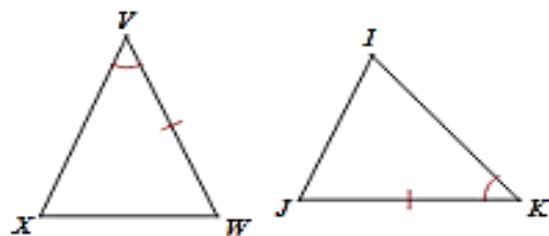


16. $x =$ _____

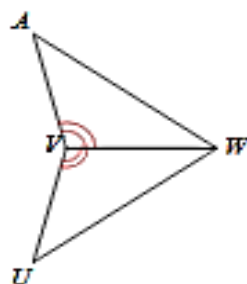


Write the congruency statement for what additional information is required in order to know that the triangles are congruent for the reason given (SSS, SAS, ASA, AAS, HL). Then add the markings to the triangles to show they are congruent.

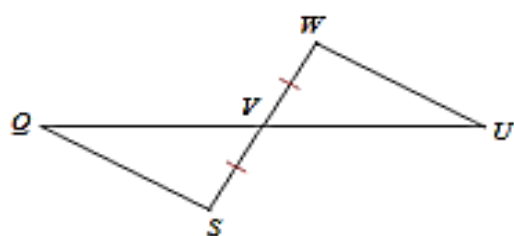
16) ASA



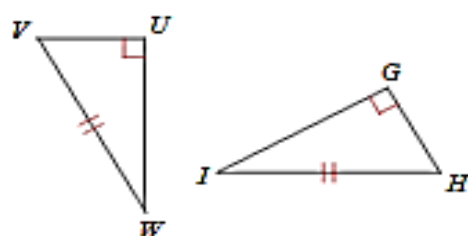
17) SAS



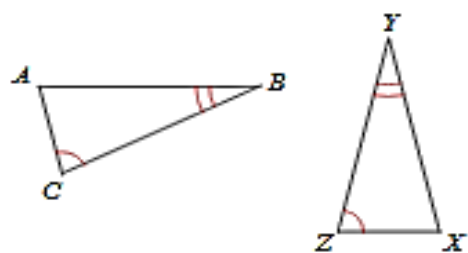
18) AAS



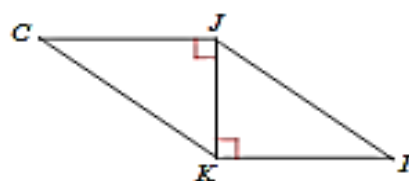
19) HL



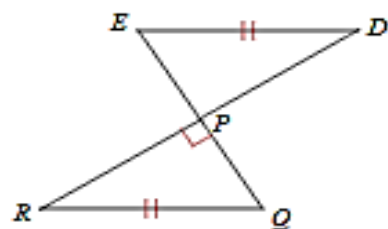
20) ASA



21) HL



22) HL



23) AAS

