

4-3 Congruency Proofs

Name: _____

Time Start: _____ Finish: _____

Total Time = _____

Figure 1

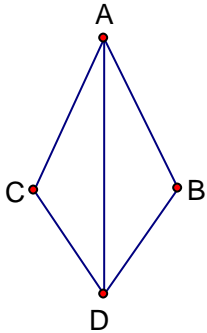


Figure 2

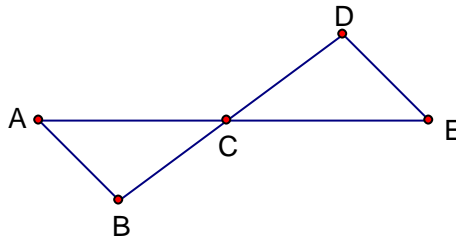


Figure 3

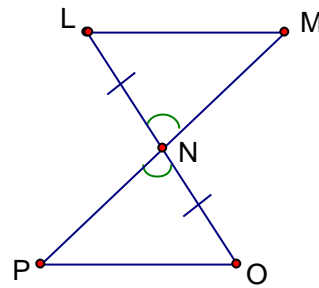


Figure 4

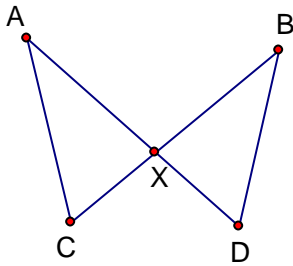


Figure 5

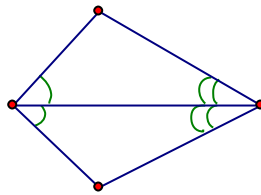
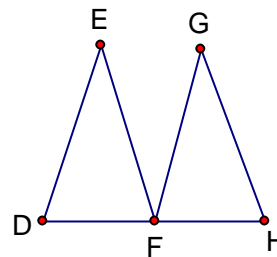


Figure 6



_____ 1. In figure 1 above, what postulate would be used to prove that $\triangle ABD \cong \triangle ACD$ if $\overline{AC} \cong \overline{AB}$ and $\overline{CD} \cong \overline{BD}$?

_____ 2. In figure 2 above, \overline{AE} and \overline{BD} bisect each other at point C. What postulate would be used to prove that $\triangle ABC \cong \triangle EDC$?

_____ 3. In figure 3 above, what additional information is needed to prove that $\triangle MNL$ is congruent to $\triangle PNO$ by ASA?

_____ 4. In figure 4 above, $AX = BX$ and $CX = DX$. What postulate would be used to prove that $\triangle AXC \cong \triangle BXD$?

_____ 5. In figure 5 above, what postulate would be used to prove that the triangles are congruent?

_____ 6. In figure 6 above, which statement below does not necessarily describe the triangles shown if $\triangle DEF \cong \triangle FGH$?

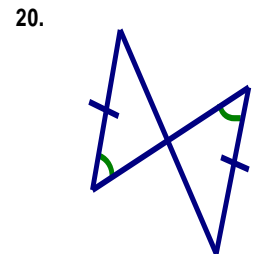
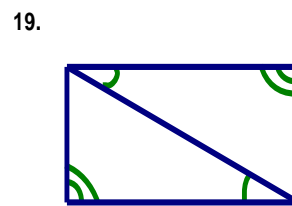
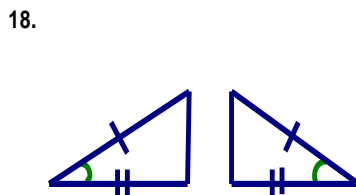
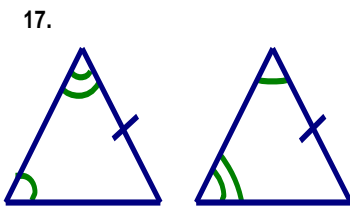
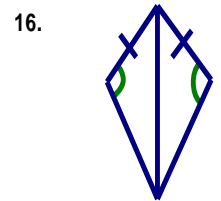
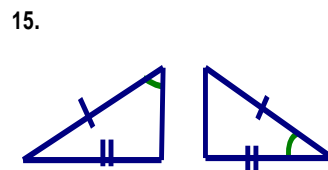
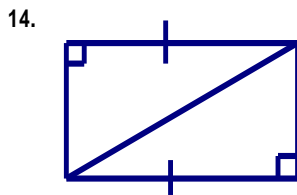
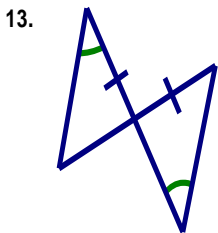
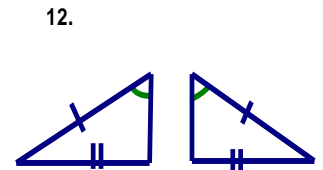
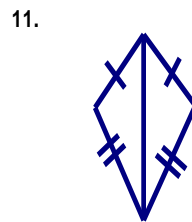
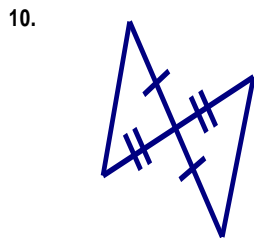
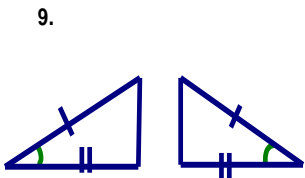
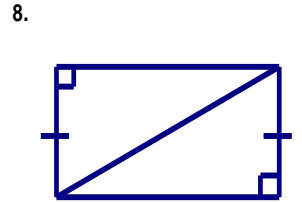
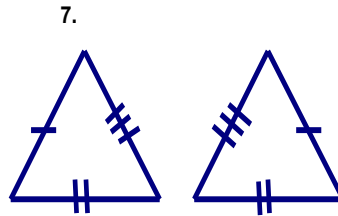
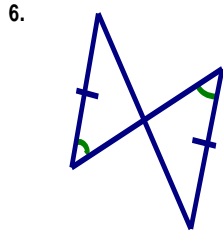
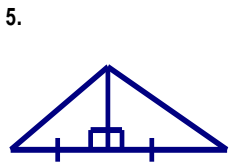
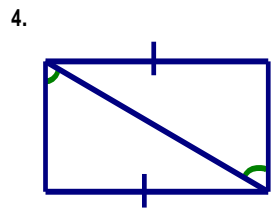
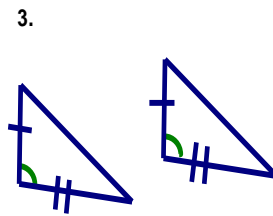
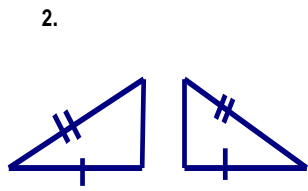
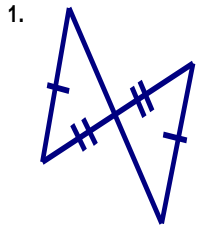
A. $\triangle EDF \cong \triangle GFH$

C. $\triangle EFD \cong \triangle GHF$

B. $\triangle FDE \cong \triangle FGH$

D. $\triangle FED \cong \triangle HGF$

Decide whether you can use SSS, ASA, AAS, SAS, or HL to prove that the given triangles are congruent. If you can't prove congruency, write NP for "not possible." Put your answers at the bottom. **Video exists for all!**



1. _____ 2. _____ 3. _____ 4. _____ 5. _____ 6. _____ 7. _____
 8. _____ 9. _____ 10. _____ 11. _____ 12. _____ 13. _____ 14. _____
 15. _____ 16. _____ 17. _____ 18. _____ 19. _____ 20. _____