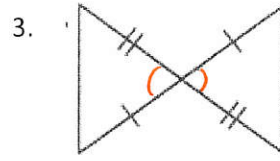
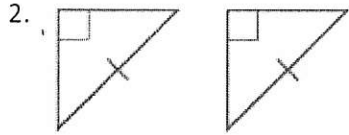
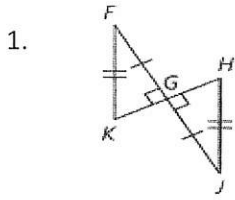


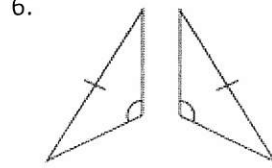
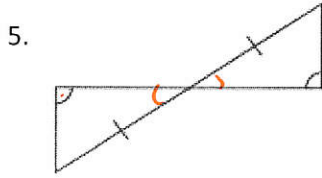
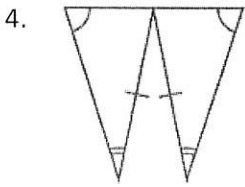
Name key Hour _____

Chapter 10 Practice Test

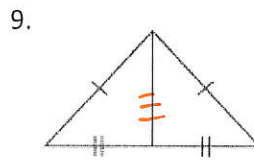
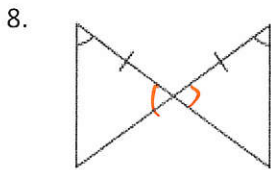
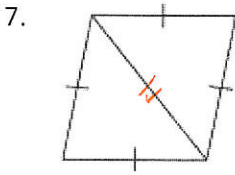
State the postulate or theorem you would use to prove each pair of triangles congruent. If the triangles cannot be proven congruent, write *not enough information*.



1. HL
 2. Not enough info
 3. SAS

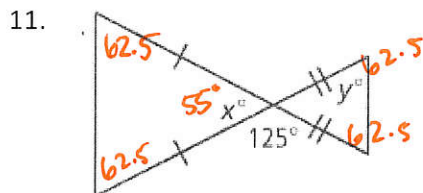
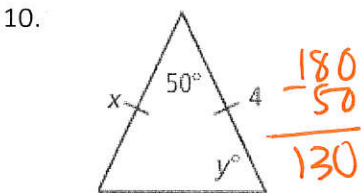


4. AAS
 5. AAS
 6. Not enough info

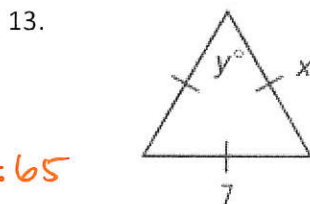
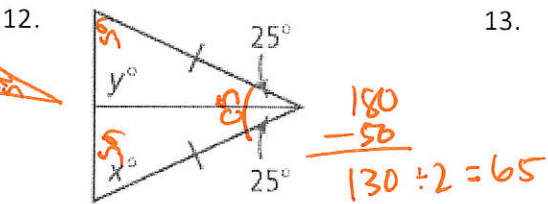


7. SSS
 8. ASA
 9. SSS

Find the values of x and y.



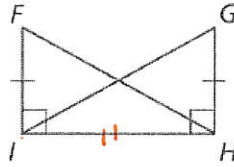
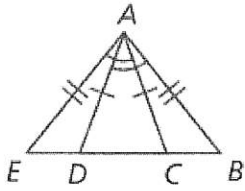
10. $x = 4$
 $y = 65^\circ$
 11. $x = 55^\circ$
 $y = 62.5$



12. $x = 65^\circ$
 $y = 90^\circ$
 13. $x = 7$
 $y = 60^\circ$

Name a pair of overlapping congruent triangles in each diagram, as a congruence statement. State whether the triangles are congruent by SSS, SAS, ASA, AAS or HL.

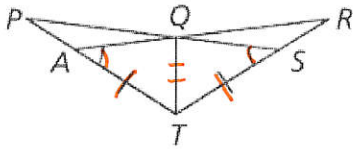
14. Given: $\overline{AB} \cong \overline{AE}, \overline{AC} \cong \overline{AD}, \angle BAD \cong \angle EAC$ 15. Given: $\angle FIH$ & $\angle GHI$ are right angles; $\overline{GH} \cong \overline{FI}$



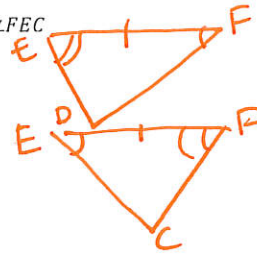
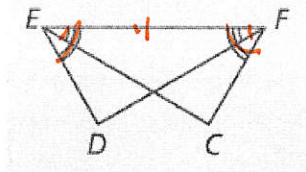
14. $\triangle FAC \cong \triangle BAD$
by SAS, ASA or AAS

15. $\triangle FIH \cong \triangle GHI$
by SAS

16. Given: $\overline{TS} \cong \overline{AT}, \angle PST \cong \angle RAT$



17. Given: $\angle EFC \cong \angle FED, \angle EFD \cong \angle FEC$



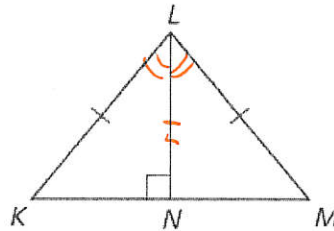
16. $\triangle TAR \cong \triangle TSP$
by ASA

17. $\triangle EDF \cong \triangle FCE$
by ASA

For Questions 18-20, complete the following proof.

Given: $\overline{LN} \perp \overline{KM}; \overline{KL} \cong \overline{ML}$

Prove: $\angle KLN \cong \angle MLN$



| Statements | Reasons | |
|---|--|--|
| 1. $\overline{LN} \perp \overline{KM}; \overline{KL} \cong \overline{ML}$ | 1. Given | |
| 2. _____ #18 | 2. Perpendicular Lines form right angles | 18. $\angle LNK$ & $\angle LNM = 90^\circ$ |
| 3. $\triangle MLN$ & $\triangle KLN$ are right triangles | 3. _____ #19 | 19. Def'n of right \triangle |
| 4. $\overline{LN} \cong \overline{LN}$ | 4. _____ #20 | 20. Reflexive Prop |
| 5. $\triangle MLN \cong \triangle KLN$ | 5. _____ #21 | 21. HL |
| 6. $\angle KLN \cong \angle MLN$ | 6. _____ #22 | 22. CPCTC |

