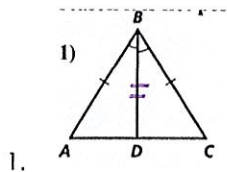
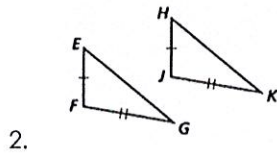


Day 4 – Triangles Congruence

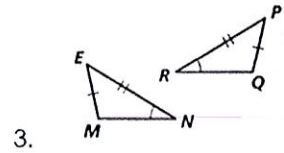
Determine whether the triangles are congruent. If they are congruent fill in the congruence statement and name the reason (**SSS**, **SAS**, **AAS**, **ASA**, or **HL**). If they are not congruent, put an **X** in the congruence statement and write **not \cong** .



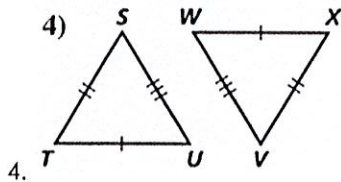
$\triangle ABD \cong \triangle CBD$ by SAS



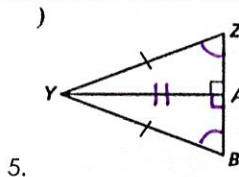
$\triangle EFG \cong \triangle HJK$ by X **not \cong**



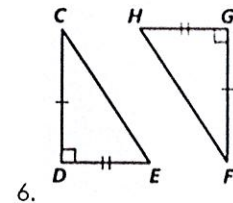
$\triangle EMN \cong \triangle RPQ$ by X **not \cong**



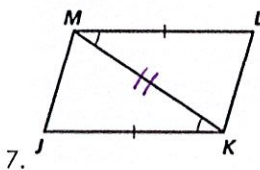
$\triangle STU \cong \triangle VWX$ by SSS



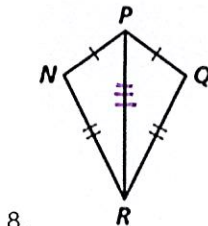
$\triangle YZA \cong \triangle YBA$ by HL or AAS



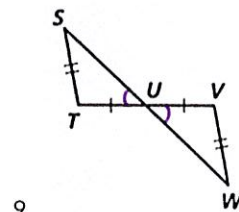
$\triangle CDE \cong \triangle FGH$ by SAS



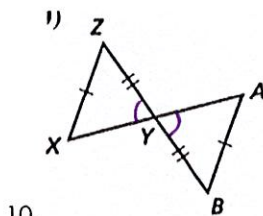
$\triangle JKM \cong \triangle MLK$ by SAS



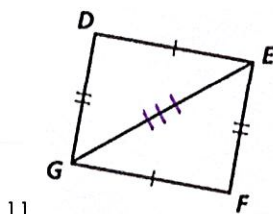
$\triangle NPR \cong \triangle QPR$ by SSS



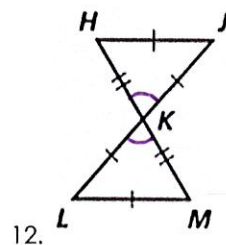
$\triangle STU \cong \triangle VWU$ by X **not \cong**



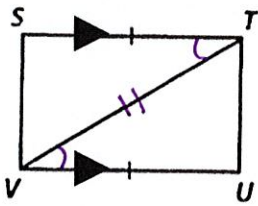
$\triangle XYZ \cong \triangle YXA$ by X **not \cong**



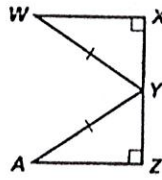
$\triangle DEG \cong \triangle FGE$ by SSS



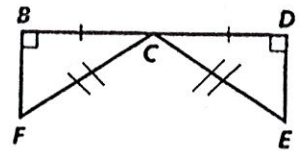
$\triangle HJK \cong \triangle MLK$ by SSS or SAS



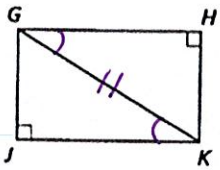
13. $\triangle STV \cong \triangle UVT$ by SAS



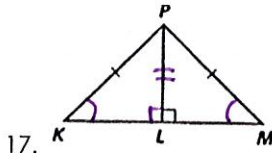
14. $\triangle WXY \cong \triangle X$ by not \cong



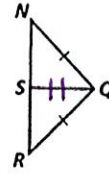
15. $\triangle BCF \cong \triangle DCE$ by HL



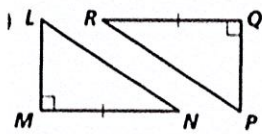
16. $\triangle GJK \cong \triangle KHG$ by AAS



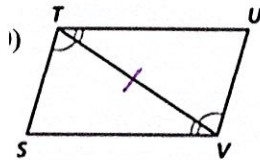
17. $\triangle KLP \cong \triangle MLP$ by HL or AAS



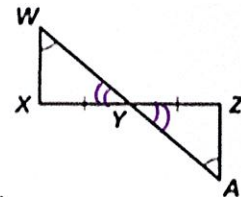
18. $\triangle NSQ \cong \triangle X$ by not \cong



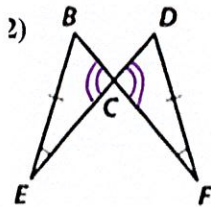
19. $\triangle LMN \cong \triangle X$ by not \cong



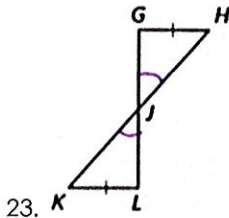
20. $\triangle STV \cong \triangle UVT$ by ASA



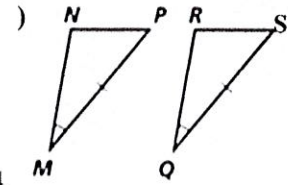
21. $\triangle WXY \cong \triangle AZY$ by AAS



22. $\triangle BCE \cong \triangle DCF$ by AAS



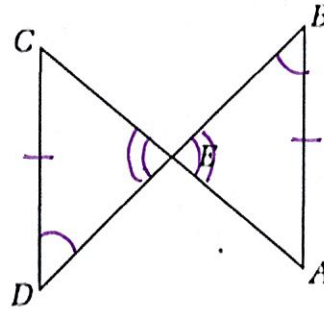
23. $\triangle GHJ \cong \triangle X$ by not \cong



24. $\triangle NPM \cong \triangle X$ by not \cong

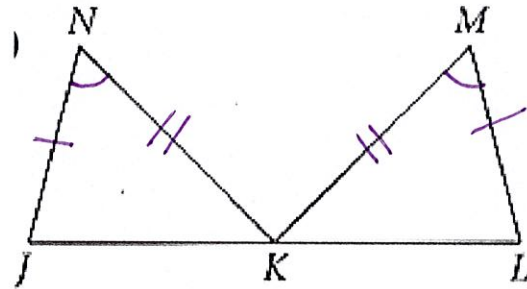
Use the given information to mark the diagram appropriately. Fill in the congruence statement and name the reason (**SSS**, **SAS**, **AAS**, **ASA**, or **HL**).

28. **Given:** $\overline{CD} \cong \overline{AB}$; $\angle B \cong \angle D$



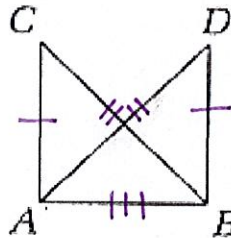
$\triangle CDE \cong \triangle ABE$ by AAS

29. **Given:** $\overline{JN} \cong \overline{LM}$; $\overline{NK} \cong \overline{MK}$; $\angle N \cong \angle M$



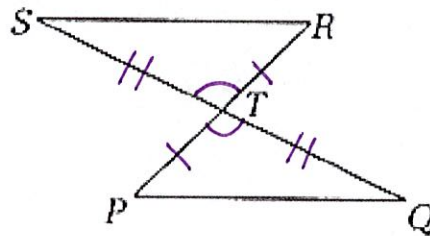
$\triangle JKN \cong \triangle LKM$ by SAS

30. **Given:** $\overline{AC} \cong \overline{BD}$; $\overline{AD} \cong \overline{BC}$



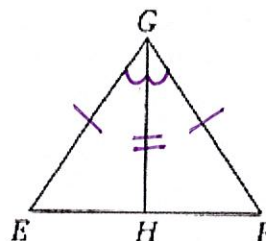
$\triangle ABC \cong \triangle BAD$ by SSS

31. **Given:** \overline{SQ} and \overline{PR} bisect each other



$\triangle RST \cong \triangle PQT$ by SAS

32. **Given:** \overline{GH} bisects $\angle EGF$; $\overline{EG} \cong \overline{FG}$



$\triangle EGH \cong \triangle FGH$ by SAS