

State the third congruence that must be given to prove that $\triangle DEF \cong \triangle MNO$.

1. Given: $\overline{DE} \cong \overline{MN}$, $\angle M \cong \angle D$, $\underline{\overline{DF} \cong \overline{MO}}$

Use the SAS Congruence Postulate

2. Given: $\overline{FE} \cong \overline{ON}$, $\angle F \cong \angle O$, $\underline{\angle D \cong \angle M}$

Use the AAS Congruence Postulate

3. Given: $\overline{DF} \cong \overline{MO}$, $\angle F \cong \angle O$, $\underline{\angle D \cong \angle M}$

Use the ASA Congruence Postulate

4. Given: $\overline{EF} \cong \overline{NO}$, $\overline{FD} \cong \overline{OM}$, $\underline{\angle F \cong \angle O}$

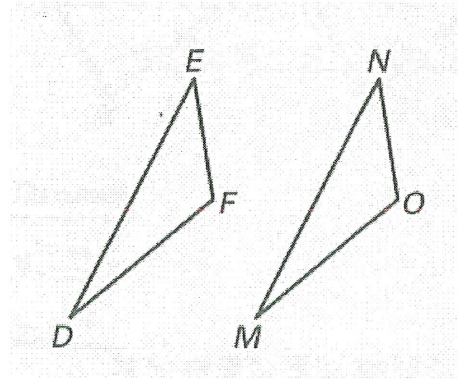
Use the SAS Congruence Postulate

5. Given: $\angle F \cong \angle O$, $\angle M \cong \angle D$, $\underline{\overline{DE} \cong \overline{MN}}$ OR $\underline{\overline{FE} \cong \overline{ON}}$

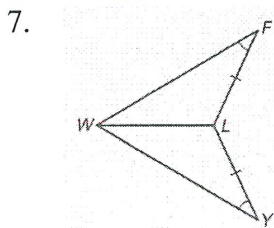
Use the AAS Congruence Postulate

6. Given: $\overline{FE} \cong \overline{ON}$, $\overline{DF} \cong \overline{MO}$, $\underline{\overline{ED} \cong \overline{NM}}$

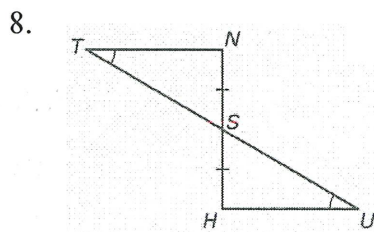
Use the SSS Congruence Postulate



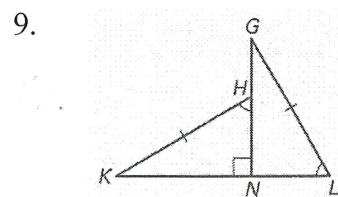
Is it possible to prove that the triangles are congruent? If so, write a congruent statement and state the postulate or theorem you would use.



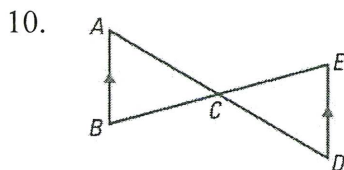
Not Enough Info



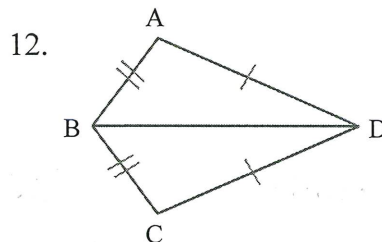
$\triangle TNS \cong \triangle UHS$



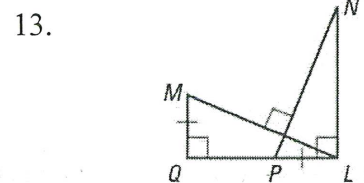
$\triangle KHN \cong \triangle GLN$



Not Enough Info



$\triangle ABD \cong \triangle CBD$



Not Enough Info

Tell whether you can use the given information to determine whether $\triangle JRM \cong \triangle XYZ$. **Explain your reasoning.** (Draw a set of triangles to help you)

14. $\overline{JM} \cong \overline{XZ}$, $\angle M \cong \angle Z$, $\angle R \cong \angle Y$

Yes

15. $\overline{JM} \cong \overline{XZ}$, $\overline{JR} \cong \overline{XY}$, $\angle J \cong \angle X$

Yes

16. $\angle J \cong \angle X$, $\angle M \cong \angle Z$, $\angle R \cong \angle Y$

No

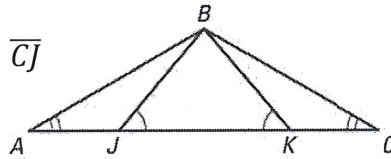
17. $\overline{JM} \cong \overline{XY}$, $\angle M \cong \angle Z$, $\angle R \cong \angle Y$

No

18. Prove.

Given: $\angle C \cong \angle A$, $\angle BJK \cong \angle BKJ$, $\overline{AK} \cong \overline{CJ}$

Prove: $\triangle ABK \cong \triangle CBJ$

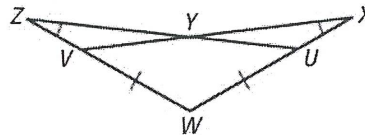


Statement	Reason
1. $\angle C \cong \angle A$ $\angle BJK \cong \angle BKJ$	1. Given
1. $\overline{AK} \cong \overline{CJ}$	
2. $\triangle ABK \cong \triangle CBJ$	2. ASA

19. Prove.

Given: $\angle X \cong \angle Z$, $\overline{VW} \cong \overline{UW}$

Prove: $\triangle XWV \cong \triangle ZWU$

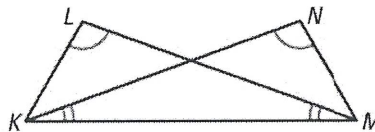


Statement	Reason
1. $\angle X \cong \angle Z$ $\overline{VW} \cong \overline{UW}$	1. Given
2. $\angle W \cong \angle W$	2. Reflexive Property
3. $\triangle XWV \cong \triangle ZWU$	3. AAS

20. Prove.

Given: $\angle L \cong \angle N$, $\angle NKM \cong \angle LMK$

Prove: $\triangle NMK \cong \triangle LKM$



Statement	Reason
1. $\angle L \cong \angle N$ $\angle NKM \cong \angle LMK$	1. Given
2. $\overline{KM} \cong \overline{MK}$	2. Reflexive Property
3. $\triangle NMK \cong \triangle LKM$	3. AAS