Geometry Section 4-3 & 4-4 Practice Sheet

Period_____

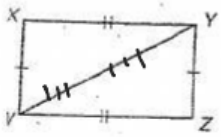
Name:_____

or each triangle, name the included angle between the pair of sides given.

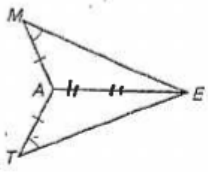
1. $\triangle MAT$: $\overline{MT}$ and $\overline{TA}$
2. $\triangle CDA$: $\overline{CA}$ and $\overline{DC}$
3. $\triangle PSC$: $\overline{CS}$ and $\overline{PS}$
4. $\triangle WDG$: $\overline{DG}$ and $\overline{GW}$

ecide whether enough information is given to prove that the langles are congruent. If there is enough information, state the ngruence postulate you would use.

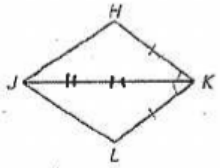
5. $\triangle XYW$, $\triangle ZWY$



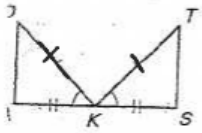

6. $\triangle MAE$, $\triangle TAE$




7. $\triangle KHJ$, $\triangle KLJ$

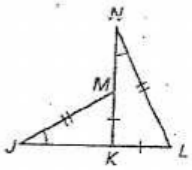



8. $\triangle DKA$, $\triangle TKS$

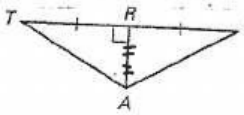




9. $\triangle JKM$, $\triangle NKL$




10. $\triangle TRA$, $\triangle GRA$




1 _____

2. _____

3. _____

4. _____

5. SSS

6. ~~SSA~~ Not ≅

7. SAS

8. SAS

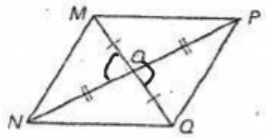
9. Not ≅

10. SAS

nplete the proof by supplying the statement or reason.

Given: $O$ is the midpoint of $\overline{MQ}$.
$O$ is the midpoint of $\overline{NP}$.

Prove: $\triangle MON \cong \triangle QOP$

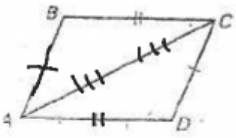



| Statements | Reasons |
|---|---|
| 1. $O$ is the midpoint of $\overline{MQ}$. | 1. ? Given |
| 2. ? $\overline{MO} \cong \overline{QO}$ | 2. Definition of midpoint |
| 3. ? $O$ is midpt of $\overline{NP}$ | 3. Given |
| 4. ? $\overline{NO} \cong \overline{PO}$ | 4. Definition of midpoint |
| 5. $\angle MON \cong \angle QOP$ | 5. ? Vertical ∠'s ≅ |
| 6. $\triangle MON \cong \triangle QOP$ | 6. ? SAS |

~~Write a paragraph proof.~~

Given: $\overline{AB} \cong \overline{CD}$, $\overline{BC} \cong \overline{DA}$

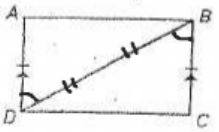
Prove: $\triangle ABC \cong \triangle CDA$




13. Write a two-column proof.

Given: $\overline{AD} \cong \overline{CB}$, $\overline{AD} \parallel \overline{CB}$

Prove: $\triangle ABD \cong \triangle CDB$




| Statement | Reason |
|---|---|
| 1) $\overline{AD} \cong \overline{CB}$, $\overline{AD} \parallel \overline{CB}$ | 1) Given |
| 2) $\overline{DB} \cong \overline{DB}$ | 2) Reflexive prop |
| 3) $\angle ADB \cong \angle CBD$ | 3) Alternate Int ∠'s ≅ |
| | 4) SAS |