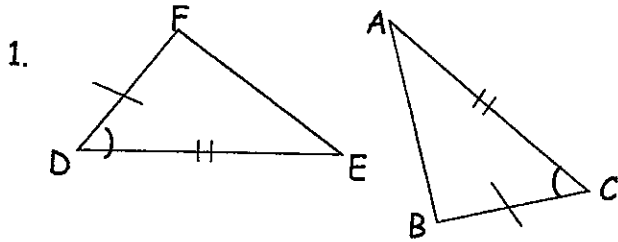
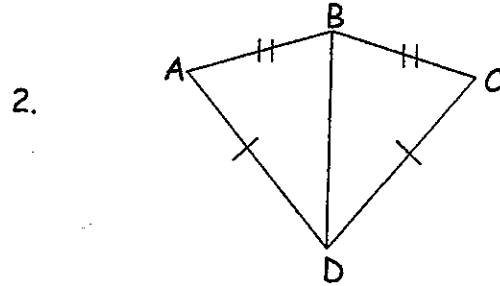


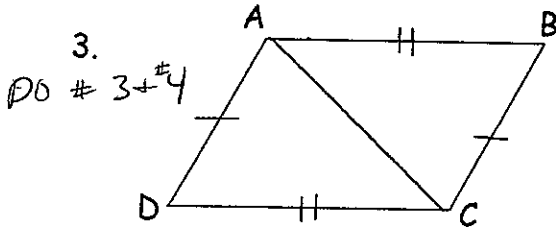
Write a congruence statement between triangles and state the postulate implied. If you cannot apply a postulate, write "no conclusion can be made."



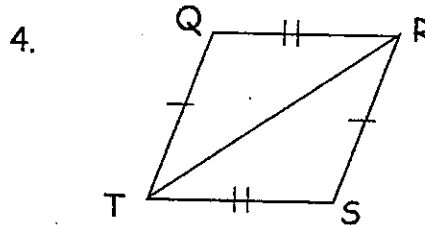
$\triangle DEF \cong \triangle CAB$   
by SAS



$\triangle BAD \cong \triangle BCD$   
by SSS



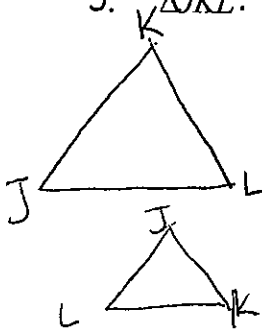
by \_\_\_\_\_



by \_\_\_\_\_

Name the included angle of the given sides of the triangle:

5.  $\triangle JKL$ : A)  $\overline{JK}$  and  $\overline{KL}$



$\angle K$  is included in both sides

6.  $\triangle QRS$ :

A)  $\overline{QR}$  and  $\overline{RS}$

$\angle R$

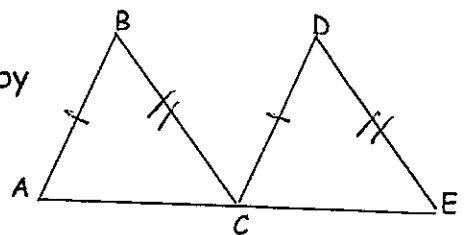
B)  $\overline{LJ}$  and  $\overline{JK}$

$\angle J$

B)  $\overline{SQ}$  and  $\overline{QR}$

$\angle Q$

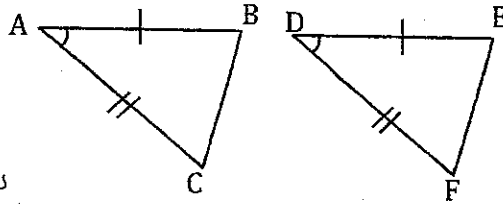
*DO # 7+8*  
7. Assume that  $\overline{AB} \cong \overline{CD}$  and  $\overline{BC} \cong \overline{DE}$ . What additional Information would you need to prove that  $\triangle ABC \cong \triangle CDE$  by SSS?  $\overline{AC} \cong \overline{CE}$



8. Assume that  $\overline{AB} \cong \overline{CD}$  and  $\overline{BC} \cong \overline{DE}$ . What additional Information would you need to prove that  $\triangle ABC \cong \triangle CDE$  by SAS? \_\_\_\_\_

Explain in plain English what is going on in the proofs.

9. Given:  $\overline{AB} \cong \overline{DE}$ ,  $\overline{AC} \cong \overline{DF}$ , and  $\angle A \cong \angle D$



Prove:  $\triangle ABC \cong \triangle DEF$

Use  
SSS  
SAS  
ASA  
AAS

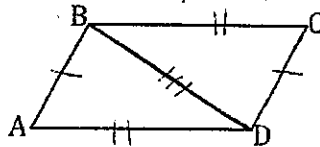
How can I prove 2 triangles are congruent?

S Since  $\overline{AB} \cong \overline{DE}$  this is a side  
S Since  $\overline{AC} \cong \overline{DF}$  "  
A Since  $\angle A \cong \angle D$  this is an angle

Statements	Reasons
1. $\overline{AB} \cong \overline{DE}$	1. Given
2. $\overline{AC} \cong \overline{DF}$	2. Given
3. $\angle A \cong \angle D$	3. Given
4. $\triangle ABC \cong \triangle DEF$	4. SAS

$\triangle ABC \cong \triangle DEF$  Because of SAS It is easier to write as a proof.

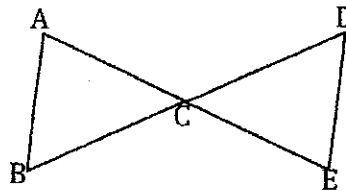
10. Given:  $\overline{AB} \cong \overline{CD}$ ,  $\overline{AD} \cong \overline{CB}$



Prove:  $\triangle ABD \cong \triangle CBD$

Statements	Reasons
1. $\overline{AB} \cong \overline{CD}$	1. Given
2. $\overline{AD} \cong \overline{CB}$	2. Given
3. $\overline{BD} \cong \overline{BD}$	3. Reflexive property
4. $\triangle ABD \cong \triangle CDB$	4. SSS

11. Given:  $\overline{AE}$  Bisects  $\overline{BD}$ ,  $\angle B \cong \angle D$



Prove:  $\triangle ABC \cong \triangle DBC$

Statements	Reasons
1. $\angle B \cong \angle D$	1. Given
2. $\overline{AC}$ Bisects $\overline{BD}$	2. Given
3. $\overline{BC} \cong \overline{DC}$	3. Definition of Bisect
4. $\angle ACB \cong \angle DCE$	4. Vertical angles
5. $\triangle ABC \cong \triangle DBC$	5. ASA