

Name:

Date:

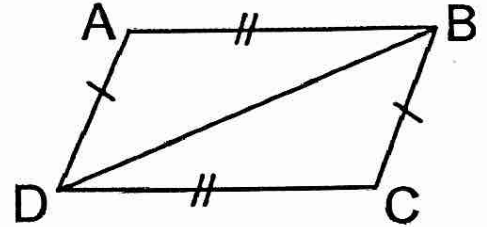
Hour:

Advanced Geometry  
WS PC #2 Review - Unit 5

keep

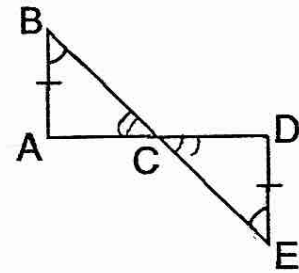
Write a proof for each.

1. Given:  $\overline{AD} \cong \overline{CB}$ ,  $\overline{AB} \cong \overline{CD}$   
 Prove:  $\triangle ABD \cong \triangle CDB$



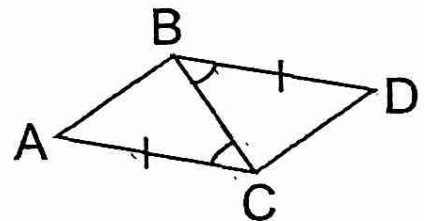
- |   |                      |
|---|----------------------|
| 1. $\overline{AD} \cong \overline{CB}$<br>$\overline{AB} \cong \overline{CD}$ | 1. given             |
| 2. $\overline{DB} \cong \overline{DB}$  | 2. Reflexive POC     |
| 3. $\triangle ABD \cong \triangle CDB$  | 3. SSS $\cong$ Thrm. |

2. Given:  $\overline{AB} \cong \overline{DE}$ ,  $\angle ABC \cong \angle DEC$   
 Prove:  $\triangle ABD \cong \triangle CDB$



- |   |                              |
|---|------------------------------|
| 1. $\overline{AB} \cong \overline{DE}$<br>$\angle ABC \cong \angle DEC$ | 1. given                     |
| 2. $\angle BCA \cong \angle ECD$  | 2. def. of vert. $\angle$ 's |
| 3. $\triangle ABD \cong \triangle CDB$                                  | 3. AAS $\cong$ Thrm.         |

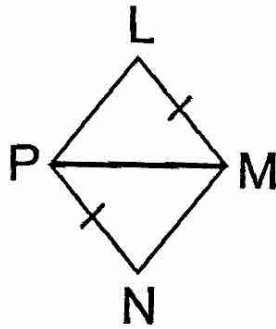
3. Given:  $\overline{AC} \cong \overline{DB}$ ,  $\angle ACB \cong \angle DBC$   
 Prove:  $\angle A \cong \angle D$



- |   |                      |
|---|----------------------|
| 1. $\overline{AC} \cong \overline{DB}$<br>$\angle ACB \cong \angle DBC$ | 1. given.            |
| 2. $\overline{BC} \cong \overline{BC}$                                  | 2. Reflexive POC     |
| 3. $\triangle ACB \cong \triangle DBC$                                  | 3. SAS $\cong$ Thrm. |
| 4. $\angle A \cong \angle D$  | 4. CPCTC             |

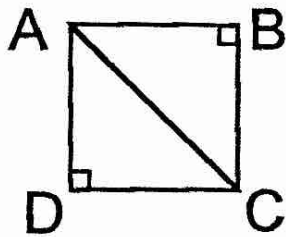
What additional information is needed that cannot be concluded from the picture to prove the triangles are congruent by the given angle congruence theorem?

4. SSS



$$\overline{PL} \cong \overline{MN}$$

5. HL

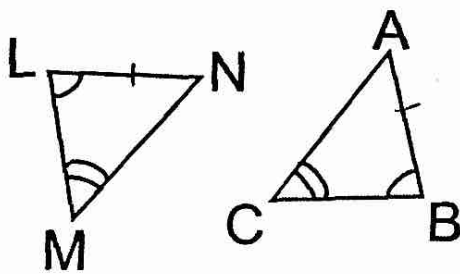


$$\overline{BC} \cong \overline{DC}$$

OR

$$\overline{AD} \cong \overline{AB}$$

6. AAS



$$\overline{LN} \cong \overline{BA}$$

OR

$$\overline{CA} \cong \overline{MN}$$