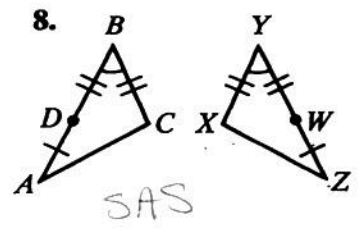
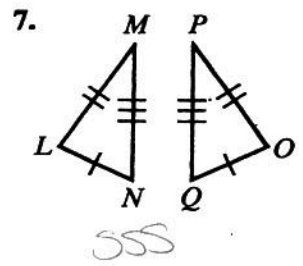
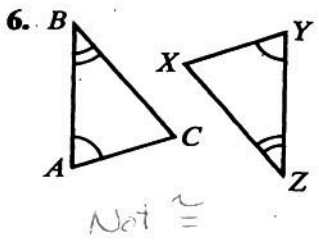
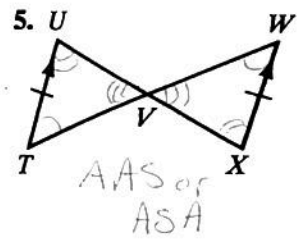
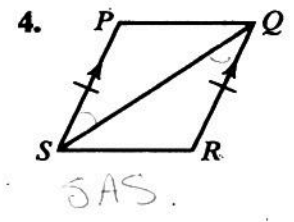
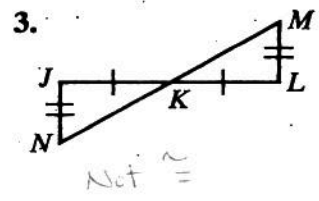
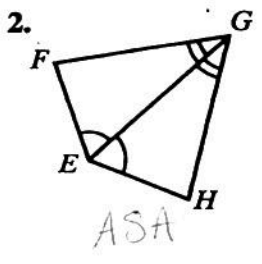
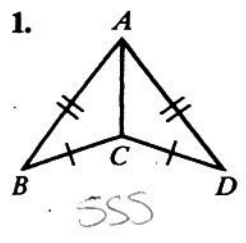


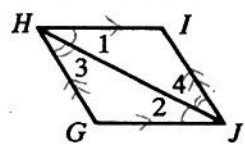
**4-2 Some Ways to Prove Triangles Congruent (continued)**

Can the two triangles be proved congruent? If so, write the congruence and name the postulate used. If not, write *no congruence can be deduced*.



Complete.

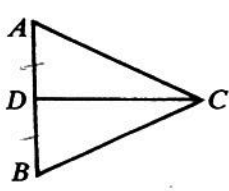
9. Given:  $\overline{HI} \parallel \overline{GJ}$ ;  $\overline{HG} \parallel \overline{IJ}$   
Prove:  $\triangle GHJ \cong \triangle IJH$



Statements	Reasons
1. $\overline{HI} \parallel \overline{GJ}$ $\overline{HG} \parallel \overline{IJ}$	1. Given
2. $\angle 1 \cong \angle 2$ ; $\angle 3 \cong \angle 4$	2. Alt. Int. Angs Thm
3. $\overline{HJ} \cong \overline{HJ}$	3. Reflexive Prop.
4. $\triangle GHJ \cong \triangle IJH$	4. ASA

All of the statements and reasons for the following proof have been provided. Number the statements and the reasons in an appropriate order. (There may be more than one correct order.)

10. Given:  $\overline{DC}$  bisects  $\overline{AB}$ ;  $\overline{AC} \cong \overline{BC}$   
Prove:  $\triangle ADC \cong \triangle BDC$



Statements	Reasons
(5) $\triangle ADC \cong \triangle BDC$	(3) Def. of midpoint
(1) $\overline{DC}$ bisects $\overline{AB}$ ; $\overline{AC} \cong \overline{BC}$	(2) Def. of segment bisector
(4) $\overline{DC} \cong \overline{DC}$	(5) SSS Post.
(2) D is the midpoint of $\overline{AB}$ .	(4) Reflexive Prop.
(3) $\overline{AD} \cong \overline{DB}$	(1) Given

\* This step could be 2nd or 3rd too