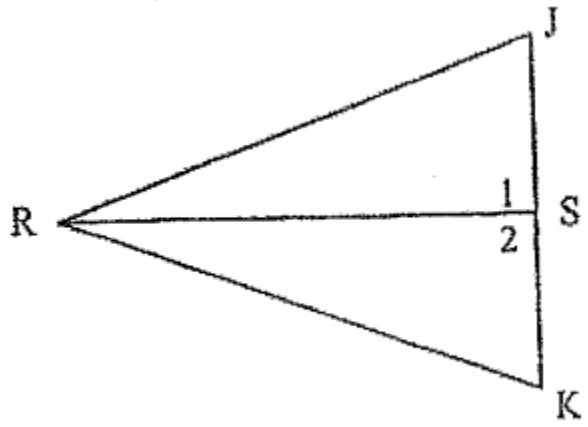
Proving Triangles Congruent Review

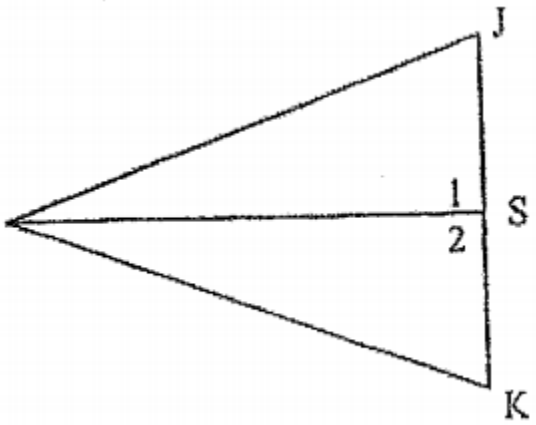
Write a two-column proof for each. Fill in the blanks.

1. Given: $\overline{RJ} \cong \overline{RK}$, $\overline{SJ} \cong \overline{SK}$
Prove: $\triangle RSJ \cong \triangle RSK$



1. _____	1. _____
2. $RS \cong RS$	2. _____
3. _____	3. _____

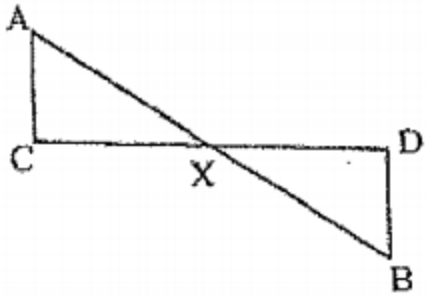
2. Given: $\angle 1$ and $\angle 2$ are right angles, $\overline{JS} \cong \overline{KS}$



2. 1. _____	1. _____
2. $\angle 1 = 90° + \angle 2 = 90°$	2. _____
3. $\angle 1 \cong \angle 2$	3. _____
4. $RS \cong RS$	4. _____
5. $\triangle RSJ \cong \triangle$ ___	5. _____

3. Given: $\overline{AB}$ and $\overline{CD}$ bisect each other

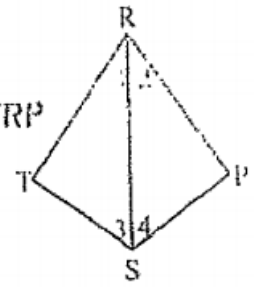
Prove: $\Delta AXC \cong \Delta BXD$



1. _____	1. _____
2. $AX \cong BX$, $CX \cong DX$	2. _____
3. $\angle AXC \cong \angle BXD$	3. _____
4. $\Delta AXC \cong \Delta BXD$	4. _____

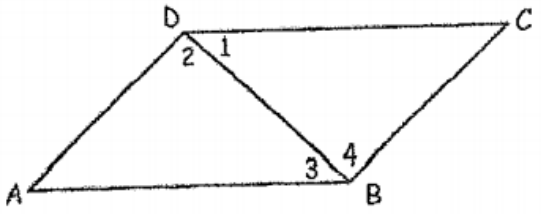
4. Given: $\angle 3 \cong \angle 4$, $\overline{RS}$ bisects $\angle TRP$

Prove: $\Delta RST \cong \Delta RSP$



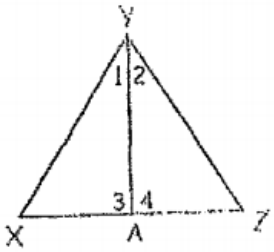
1. _____	1. _____
2. $\angle 1 \cong \angle 2$	2. _____
3. $RS \cong RS$	3. _____
4. $\Delta RST \cong \Delta RSP$	4. _____

5. Given: $\overline{AB} \cong \overline{CD}$
$\overline{AB} \parallel \overline{CD}$
Prove: $\Delta ABD \cong \Delta CDB$



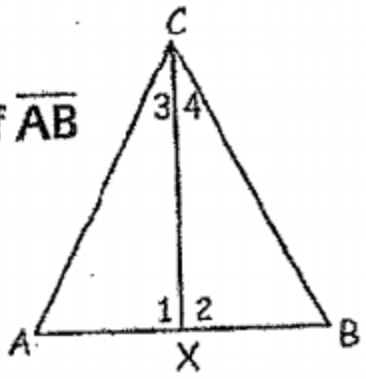
1. _____	1. _____
2. $\angle 3 \cong \angle 1$	2 _____
3. _____	3. Reflexive
4. $\Delta ABD \cong \Delta$ ___	4.

6. Given: $\angle X \cong \angle Z$
$\angle 3 \cong \angle 4$
Prove: $XA \cong ZA$



1. _____	1. ___
2. $AY \cong AY$	2. ___
3. $\Delta XYA \cong \Delta$ ___	3. ___
4. _____	4. ___

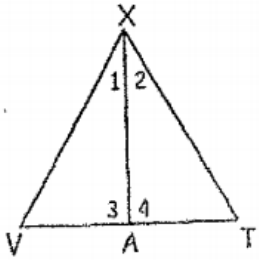
7. Given: $\overline{AC} \cong \overline{BC}$
X is the midpoint of $\overline{AB}$
Prove: $\angle 3 \cong \angle 4$



1.

1. _____	1. _____
2. $AX \cong BX$	2. _____
3. $XC \cong XC$	3. _____
4. $\triangle ACX \cong \triangle$ ___	4. _____
5. $\angle 3 \cong \angle 4$	5. _____

8. Given: $\overline{AX} \perp \overline{VT}$
$\angle 1 \cong \angle 2$
Prove: $\angle V \cong \angle T$



1.	1.
2. $\angle 3 = 90°$; $\angle 4 = 90°$	2. def of ___
3. $\angle 3 \cong \angle 4$	3. _____
4. $XA \cong XA$	4. _____
5. $\triangle VXA \cong \triangle$ ___	5. _____
6. $\angle V \cong \angle T$	6. _____