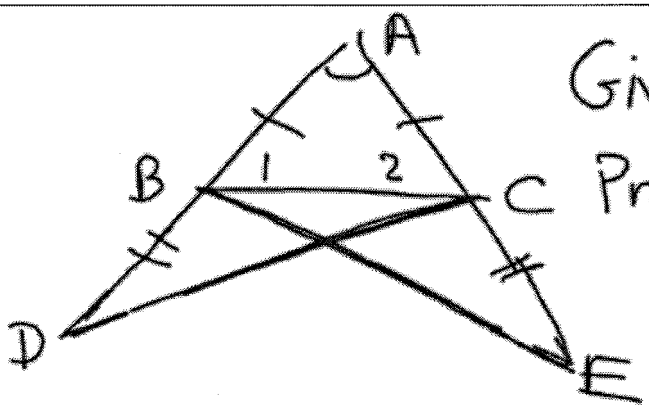


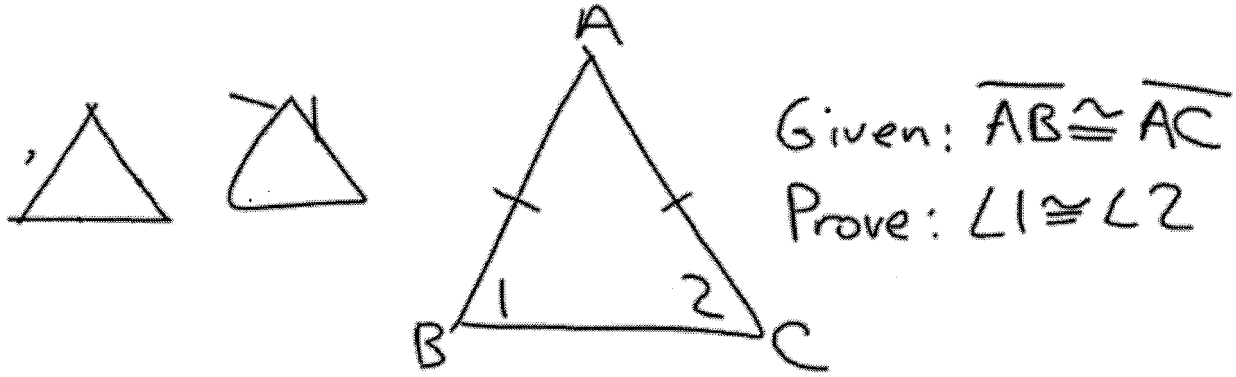
Given: Diag.

Prove: $\angle 1 \cong \angle 2$

1. $\overline{AB} \cong \overline{AC}$	1. G
2. $\overline{BD} \cong \overline{CE}$	2. G
3. $\overline{AD} \cong \overline{AE}$	3. Add. Prop.
4. $\angle A \cong \angle A$	4. Reflex.
5. $\triangle ADC \cong \triangle AEB$	5. SAS (3, 4, 1)
6. $\overline{CD} \cong \overline{BE}$	6. CPCTC
7. $\angle D \cong \angle E$	7. CPCTC
8. $\triangle BCD \cong \triangle CBE$	8. SAS (6, 7, 2)
9. $\angle CBD \cong \angle BCE$	9. CPCTC
10. $\angle CBD$ supp. $\angle 1$, $\angle BCE$ supp. $\angle 2$	10. Diag.
11. $\angle 1 \cong \angle 2$	11. Supps. of $\cong$ $\angle$s are $\cong$
	□

Pons asinorum
(Bridge of Donkeys)

<u>Modern Version</u>

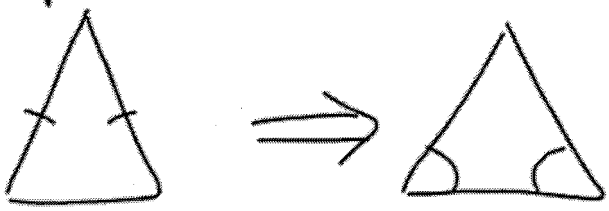


Given: $\overline{AB} \cong \overline{AC}$

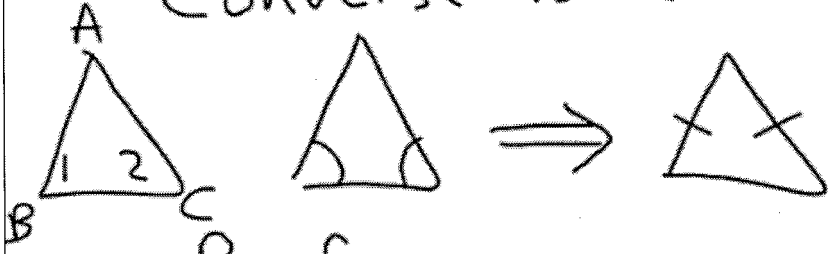
Prove: $\angle 1 \cong \angle 2$

1. $\overline{AB} \cong \overline{AC}$	1. G
2. $\overline{BC} \cong \overline{BC}$	2. Reflex.
3. $\triangle ABC \cong \triangle ACB$	3. SSS(1,2,1)
4. $\angle 1 \cong \angle 2$	4. CPCTC
	□

Pons asinorum:



Converse is also true!!



Proof:

1. $\angle 1 \cong \angle 2$	1. G
2. $\overline{BC} \cong \overline{BC}$	2. Reflex.
3. $\Delta ABC \cong \Delta ACB$	3. ASA (1, 2, 1)
4. $\overline{AB} \cong \overline{AC}$	4. CPCTC

□