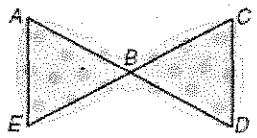
1. U.S. President Harry Truman and British Prime Minister Winston Churchill both wore polka-dot bow ties while in office. A well-tied bow tie resembles two congruent triangles. Complete the following proof:

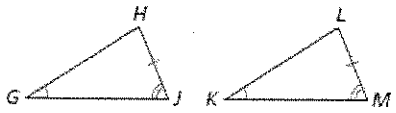


Given: $\overline{BA} \cong \overline{BD}$, $\overline{BE} \cong \overline{BC}$

Prove: $\triangle ABE \cong \triangle DBC$

S / A Or HL	*Statements*	*Reasons*
	1.	1. Given
	2.	2.
	3.	3. Given
	4.	4.

2. **Given:** $\angle G \cong \angle K$, $\angle J \cong \angle M$, $\overline{HJ} \cong \overline{LM}$
Prove: $\triangle GHJ \cong \triangle KLM$
Proof:



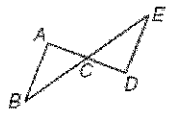
S / A Or HL	Statements	Reasons
	1.	1. Given
	2.	2.
	3.	3. Given
	4. $\triangle GHJ \cong \triangle KLM$	4.

3. The Hatfield and McCoy families are feuding over some land. Neither family will be satisfied unless the two triangular fields are exactly the same size. You know that C is the midpoint of each of the intersecting segments. Complete the following proof:

Given: C is the midpoint of $\overline{AD}$ and $\overline{BE}$.

Prove: $\triangle ABC \cong \triangle DEC$

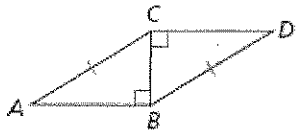
Proof:



S / A Or HL	*Statements*	*Reasons*
	1.	1.
	2.	2. Definition of Midpoint
	3.	3.
	4.	4. Definition of Midpoint
	5.	5.

4. Given: $\overline{AC} \cong \overline{DB}$, $\angle ABC$ *and* $\angle DCB$ are right angles

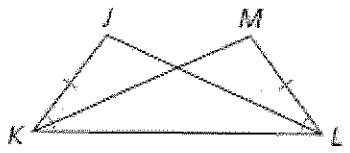
   Prove: $\Delta ABC \cong \Delta DCB$



A/S Or HL	*Statements*	*Reasons*
	1.	1. Given
H	2.	2.
L	3.	3.
	4.	4.

5. Given: $\overline{JK} \cong \overline{ML}, \angle JKL \cong \angle MLK$
Prove: $\triangle JKL \cong \triangle MLK$

Proof:



S/A Or HL	Statements	Reasons
S	1.	1.
A	2.	2.
S	3.	3. Reflexive POC
	4.	4.

6. Given: $\overline{AB} \parallel \overline{ED}, \overline{BC} \cong \overline{DC}$
Prove: $\triangle ABC \cong \triangle EDC$
Proof:

S / A Or HL	Statements	Reasons
	1.	1. Given
A	2. $\angle A = \angle E$	2.
A	3.	3.
S	4.	4. Given
	5.	5.