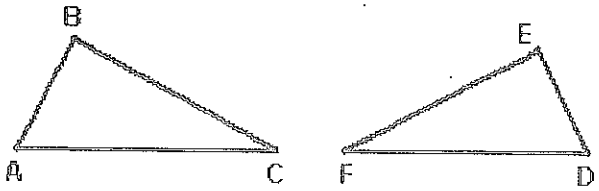
G5: Triangle & Quadrilateral Application & Proofs
Intro to Two-Column Proofs

Name:_____
Date:_____ Per:_____

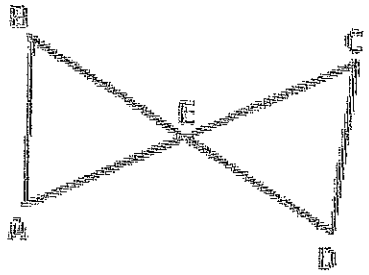
in the blanks to complete the two-column proof. Check each proof with your group before moving on.

1. Given: $\overline{AB} \cong \overline{DE}$
$\angle B \cong \angle E$
$\overline{BC} \cong \overline{EF}$
Prove: $\Delta ABC \cong \Delta DEF$



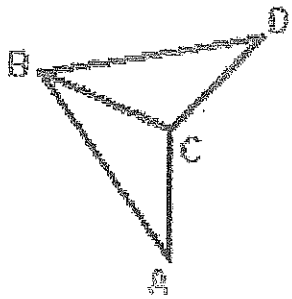
Statement	Reason
1. $\overline{AB} \cong \overline{DE}$	
2. $\angle B \cong \angle E$	
3. $\overline{BC} \cong \overline{EF}$	
$\Delta ABC \cong \Delta DEF$	

2. Given: E is the midpoint of $\overline{BD}$
$\overline{AE} \cong \overline{EC}$
Prove: $\Delta AEB \cong \Delta CED$



Statement	Reason
1. $\overline{BE} \cong \overline{ED}$	
2. $\angle BEA \cong \angle DEC$	
3. $\overline{AE} \cong \overline{EC}$	

3. Given: $\angle D \cong \angle A$
$\angle BCD \cong \angle BCA$
Prove: $\Delta ABC \cong \Delta DBC$



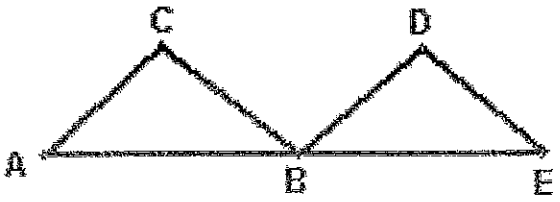
Statement	Reason
1. $\angle D \cong \angle A$	
2.	Given
3. $\overline{BC} \cong \overline{CB}$	

4. Given: $\angle A \cong \angle E$

$\angle CBA \cong \angle DBE$

B is midpoint of $\overline{AE}$

Prove: $\Delta ABC \cong \Delta EBD$



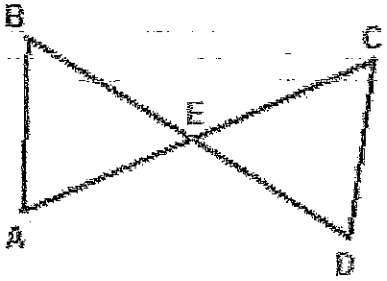
Statement	Reason

5. Given: $\overline{BA} \cong \overline{DC}$

$\overline{BD}$ bisects $\overline{AC}$

$\overline{AC}$ bisects $\overline{BD}$

Prove: $\Delta ABE \cong \Delta CDE$

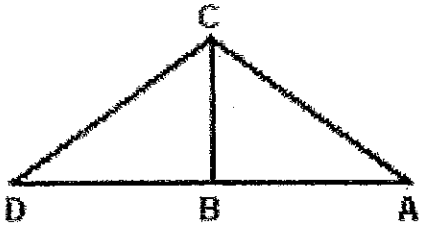


Statement	Reason

6. Given: $\angle DBC$, $\angle ABC$ rt $\angle$s

$\overline{DC} \cong \overline{AC}$

Prove: $\Delta DBC \cong \Delta ABC$



Statement	Reason