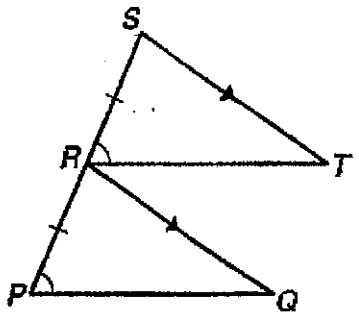
Complete each proof.

– pg 4

16. Given: $\overline{ST} \parallel \overline{RQ}$, $\overline{SR} \cong \overline{RP}$, $\angle SRT \cong \angle RPQ$

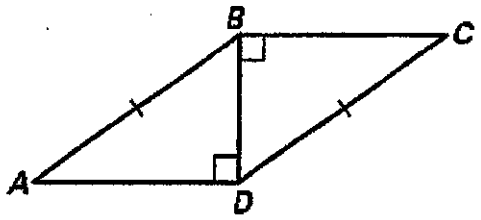
Prove: $\overline{RT} \cong \overline{PQ}$



Statements	Reasons
1.	**1.**
2. $\angle RST \cong \angle PRQ$	**2.**
3. $\Delta RST \cong \Delta PRQ$	**3.**
4.	**4.**

17. Given: $\overline{AB} \cong \overline{CD}$, $\angle ADB$ *and* $\angle DBC$ are right angles

Prove: $\angle ABD \cong \angle CDB$



Statements	Reasons
1.	**1.**
2.	**2. Reflexive**
3.	**3. HL**
4.	**4.**

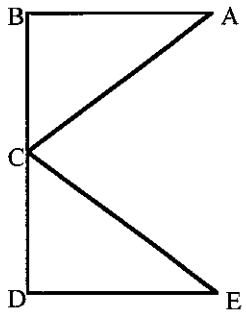
pg. 5

Geometry
Assignment #9 CPCTC Worksheet
Label the diagram and then write a paragraph proof.

Name_____
Group #: _____ Period: _____

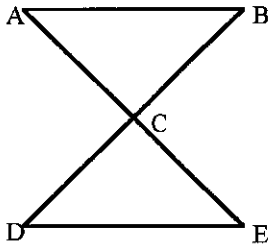
1. Given: $\angle BCA \cong \angle DCE$
   $\angle B$ and $\angle D$ are right angles
   C is the midpoint of $\overline{BD}$

   Prove: $\overline{BA} \cong \overline{DE}$



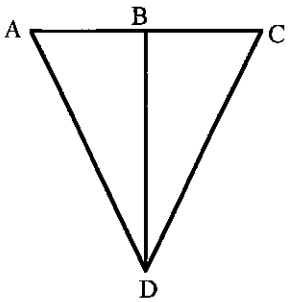
2. Given: $\overline{AC} \cong \overline{EC}$
   C bisects $\overline{BD}$

   Prove: $\overline{AB} \cong \overline{ED}$



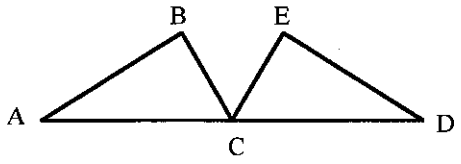
3. Given: $\overline{AC} \perp \overline{BD}$
   $\overline{AD} \cong \overline{CD}$

   Prove: $\overline{AB} \cong \overline{BC}$



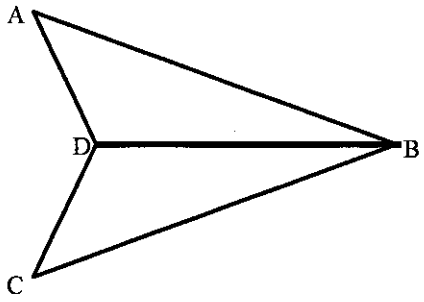
4. Given: $\overline{AB} \cong \overline{DE}$, $\overline{BC} \cong \overline{EC}$,
C is the midpoint of $\overline{AD}$

Prove: $\angle A \cong \angle D$



5. Given: $\overline{DB}$ bisects $\angle ABC$
$\overline{AB} \cong \overline{CB}$

Prove: $\angle A \cong \angle C$



6. Given: C bisects $\overline{AE}$
$\angle$B and $\angle$D are right angles
$\angle A \cong \angle E$

Prove: $\overline{BC} \cong \overline{DC}$