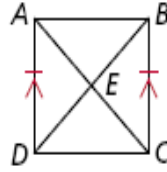


For each problem below, write a two-column proof.

1. Use AAS to prove the triangles congruent.

Given: $\overline{AD} \parallel \overline{BC}$, $\overline{AD} \cong \overline{CB}$

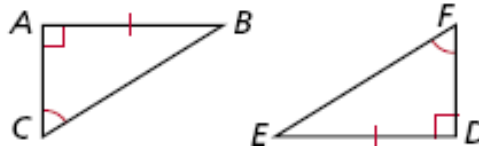
Prove: $\triangle AED \cong \triangle CEB$



Statements	Reasons
	1.
	2. alternate interior angles are congruent
	3.
	4.

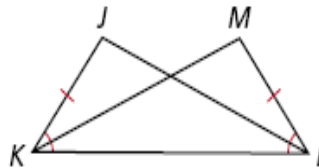
2. Given: $\overline{AB} \cong \overline{DE}$, $\angle C \cong \angle F$
 Prove: $\triangle ABC \cong \triangle DEF$

(3 or 4 steps)



Statements	Reasons

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

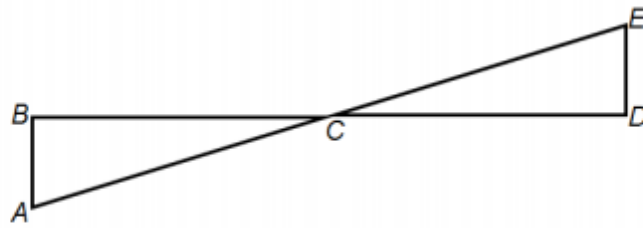


Statements	Reasons
	1. Given
	2. Given
	3. Reflexive property
	4.

Name: _____

Complete each proof by filling in the correct reasons.

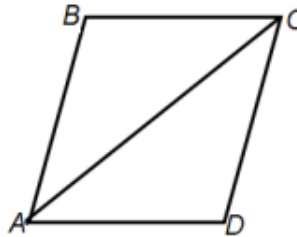
Given: C is midpoint of \overline{BD}
 $\overline{AB} \perp \overline{BD}$
 $\overline{BD} \perp \overline{DE}$



Prove: $\triangle ABC \cong \triangle EDC$

Statement	Reason
1. C is midpoint of \overline{BD}	
2. $\overline{AB} \perp \overline{BD}$ and $\overline{BD} \perp \overline{DE}$	
3. $\overline{BC} \cong \overline{CD}$	
4. $\angle BCA \cong \angle ECD$	
5. $\angle ABC$ and $\angle EDC$ are right angles	
6. $\angle ABC \cong \angle EDC$	
7. $\triangle ABC \cong \triangle EDC$	

Given: $\overline{BC} \cong \overline{DA}$
 \overline{AC} bisects $\angle BCD$



Prove: $\triangle ABC \cong \triangle CDA$

Statement	Reason
1. $\overline{BC} \cong \overline{DA}$	
2. \overline{AC} bisects $\angle BCD$	
3. $\angle BCA \cong \angle DCA$	
4. $\overline{AC} \cong \overline{AC}$	
5. $\triangle ABC \cong \triangle CDA$	