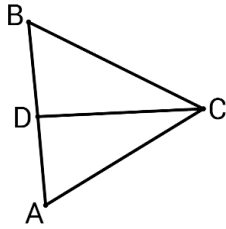


Math 2 Unit 3 Worksheet 3E
Perpendiculars

Name: _____
 Date: _____ Per: _____

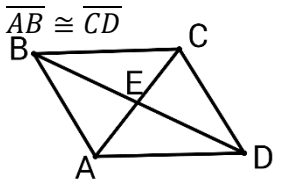
Perpendicular segments form right angles. All right angles are congruent.

1. Given: $\overline{AB} \perp \overline{DC}$, $\overline{BC} \cong \overline{AC}$
 Prove: $\triangle BDC \cong \triangle$ _____



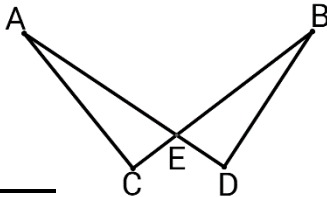
Statement	Reason
1.	1. Given
2.	2. Definition of \perp
3.	3. Reflexive Prop of \cong
4.	4. HL \cong

2. Given: $\overline{BD} \perp \overline{AC}$, \overline{BD} bisects \overline{AC} , $\overline{AB} \cong \overline{CD}$
 Prove: $\triangle AEB \cong \triangle$ _____



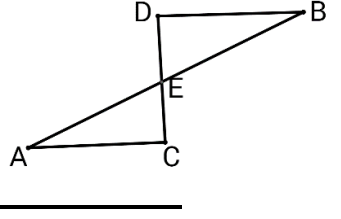
Statement	Reason
1. $\overline{BD} \perp \overline{AC}$, \overline{BD} bisects \overline{AC} , $\overline{AB} \cong \overline{CD}$	1.
2. $\angle AEB$ and $\angle CED$ are right angles	2.
3. $\overline{AE} \cong \overline{CE}$	3.
4. $\triangle AEB \cong \triangle$ _____	4.

3. Given: $\overline{AC} \perp \overline{CB}$, $\overline{AD} \perp \overline{DB}$, $\overline{AE} \cong \overline{BE}$
 Prove: $\triangle BDE \cong \triangle$ _____



Statement	Reason

4. Given: E is midpoint of \overline{DC} , $\overline{DB} \perp \overline{DC}$, $\overline{AC} \perp \overline{DC}$
 Prove: $\triangle AEC \cong \triangle$ _____



Statement	Reason