

Name: \_\_\_\_\_

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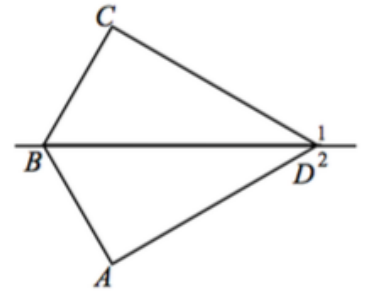
**UNIT 3**

**LESSON 9**

**AIM: HOW DO WE USE CPCTC? (DAY 2)**

*Do Now:* If  $\angle 1 \cong \angle 2$ , what can you conclude about  $\angle CDB$  and  $\angle ADB$ ?

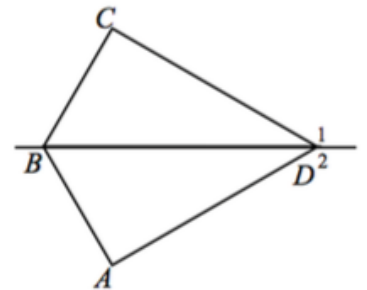
STATEMENT	REASON



**EXAMPLE #1:**

Given:  $\angle 1 \cong \angle 2$  and  $\overline{CD} \cong \overline{AD}$

Prove:  $\overline{BD}$  bisects  $\angle CBA$



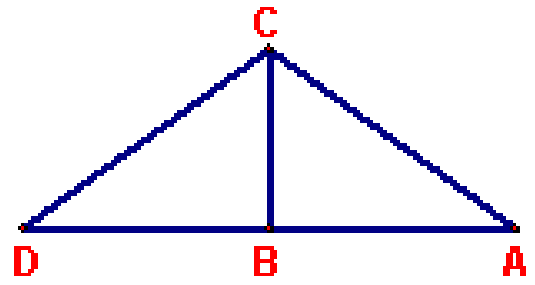
STATEMENT	REASON

**EXAMPLE #2:**

Given:  $\overline{CB}$  is the altitude to  $\overline{DA}$

$\overline{CB}$  bisects  $\angle ACD$

Prove:  $B$  is the midpoint of  $\overline{DA}$



STATEMENT

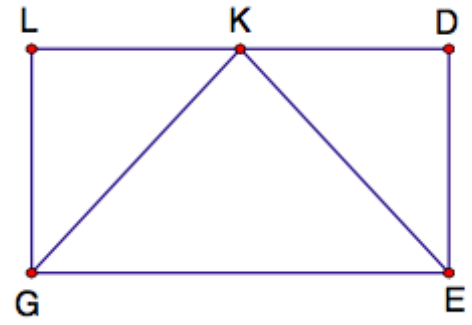
REASON

**EXAMPLE #3:**

Given:  $\angle KGE \cong \angle KEG$ ,  $\overline{GL} \perp \overline{LD}$ ,  $\overline{ED} \perp \overline{DL}$  and

$K$  is the midpoint of  $\overline{LD}$

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



STATEMENT

REASON

Name: \_\_\_\_\_

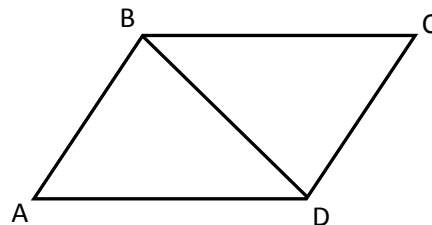
Date: \_\_\_\_\_

**UNIT 3**

**LESSON 9**

**HOMEWORK**

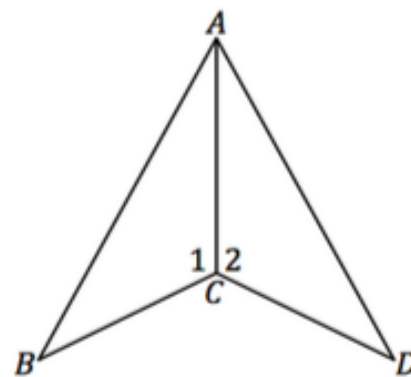
1. Given:  $\overline{BC} \parallel \overline{AD}$  and  $\angle A \cong \angle C$   
Prove:  $\overline{BD}$  bisects  $\sphericalangle ABC$



STATEMENT

REASON

2. Given:  $\angle 1 \cong \angle 2$  and  $\overline{BC} \cong \overline{DC}$   
Prove:  $\overline{AC}$  bisects  $\angle BAD$



STATEMENT

REASON