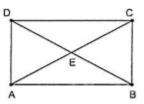
UNIT 4 LESSON 7

AIM: HOW DO WE COMPLETE RECTANGLE PROOFS?

Do Now: In rectangle ABCD, CB = 6, AB = 8, AC = 10. Find

- a) AD
- b) CD
- c) EC
- d) AE
- e) DE
- f) EB
- g) DB

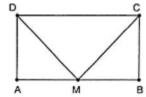


PROOFS <u>USING</u> RECTANGLE PROPERTIES:

1. Given: ABCD is a rectangle

M is the midpoint of \overline{AB}

Prove: $\overline{DM} \cong \overline{CM}$



STATEMENT REASON

PROOFS <u>PROVING</u> A QUADRILATERAL IS A RECTANGLE:

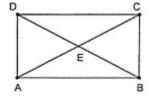
YOU ALWAYS HAVE TO HAVE A PARALLELOGRAM FIRST! Which means if you do not have a parallelogram given to you, you need to prove that first!	
REASON	DIAGRAM

2. *Given*: ∠*ABC* is a right angle

 \overline{BE} is the median to \overline{AC}

 $\overline{BE} \cong \overline{DE}$

Prove: ABCD is a rectangle

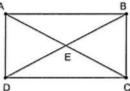


STATEMENT	REASON

Name:	Date:
UNIT 4	LESSON 7

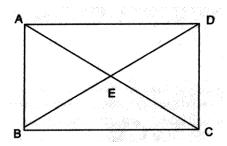
HOMEWORK

1.) Given: ABCD is a rectangle Prove: $\triangle ADC \cong \triangle BCD$ (*HINT!- Look for a reflexive piece!)



	o c
STATEMENT	REASON

2.) Given: E is the midpoint of $\overline{AC} \& \overline{BD}$ and $\overline{AB} \perp \overline{BC}$ Prove: ABCD is a rectangle.



STATEMENT	REASON