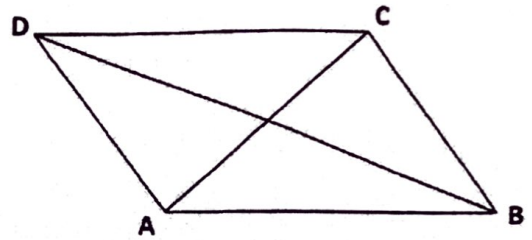


3. Given:  $\overline{AD} \parallel \overline{BC}$   
 $\overline{AD} \cong \overline{BC}$   
 $\overline{AC} \perp \overline{BD}$

Prove: ABCD is a rhombus

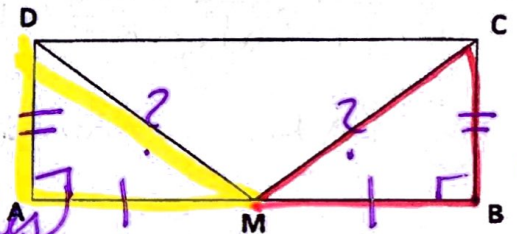


Statements	Reasons

4. Given: ABCD is a rectangle  
M is the midpoint of  $\overline{AB}$  ✓

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

\* Prove:  $\triangle DCM$  is isosceles



Statements	Reasons
① ABCD rectangle M midpt. of $\overline{AB}$	① Given
② $\overline{AM} \cong \overline{MB}$	② Defn of midpt.
③ $\overline{DA} \cong \overline{CB}$	③ if quad. is a rect., then opp. sides $\cong$
④ $\angle A, \angle B$ are right $\angle$ s	④ if quad. is rectangle then all angles are right $\angle$ s
⑤ $\angle A \cong \angle B$	⑤ all right $\angle$ s are $\cong$
⑥ $\triangle DAM \cong \triangle CBM$	⑥ SAS
⑦ $\overline{DM} \cong \overline{CM}$	⑦ CPCTC

\* ⑧  $\triangle DCM$  is isosceles ⑧ if a  $\triangle$  has 2  $\cong$  sides, then it is isosceles.