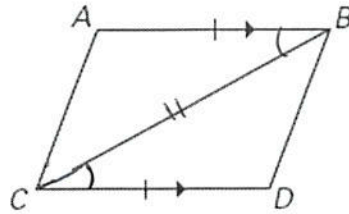
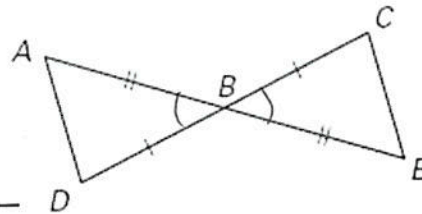


1. Given: $\overline{AB} \parallel \overline{CD}, \overline{AB} \cong \overline{CD}$
 Prove: $\triangle ABC \cong \triangle DCB$



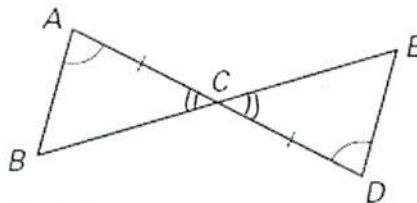
Statements	reasons
① $\overline{AB} \parallel \overline{CD}$ $\overline{AB} \cong \overline{CD}$	① given
② $\angle ABC \cong \angle DCB$	② AIA Thm
③ $\overline{CB} \cong \overline{BC}$	③ reflexive prop of \cong
④ $\triangle ABC \cong \triangle DCB$	④ SAS

2. Given: B is the midpoint of \overline{AE} .
 B is the midpoint of \overline{CD} .
 Prove: $\triangle ABD \cong \triangle EBC$



Statements	reasons
① B is mdpt of \overline{AE} B is mdpt of \overline{CD}	① given
② $\overline{AB} \cong \overline{EB}$	② Def of mdpt
③ $\overline{DB} \cong \overline{CB}$	③ Def of mdpt
④ $\angle ABD \cong \angle EBC$	④ vertical \angle 's \cong Thm
⑤ $\triangle ABD \cong \triangle EBC$	⑤ SAS

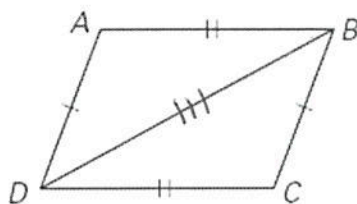
3. Given: $\overline{AC} \cong \overline{DC}, \angle A \cong \angle D$
 Prove: $\angle B \cong \angle E$



Statements	reasons
① $\overline{AC} \cong \overline{DC}$ $\angle A \cong \angle D$	① given
② $\angle ACB \cong \angle DCE$	② vertical \angle 's \cong Thm
③ $\triangle ACB \cong \triangle DCE$	③ ASA
④ $\angle B \cong \angle E$	④ CPCTC

4. Given: $\overline{AB} \cong \overline{DC}$, $\overline{AD} \cong \overline{BC}$

Prove: $\angle A \cong \angle C$



Statements	Reasons
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① $\overline{AB} \cong \overline{DC}$
 $\overline{AD} \cong \overline{BC}$

① given

② $\overline{DB} \cong \overline{BD}$

② reflexive prop of \cong

③ $\triangle ADB \cong \triangle CBD$

③ SSS

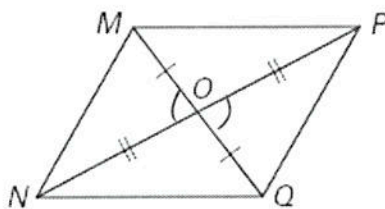
④ $\angle A \cong \angle C$

④ CPCTC

5. Given: O is the midpoint of \overline{MQ}

O is the midpoint of \overline{NP} .

Prove: $\triangle MON \cong \triangle QOP$



Statements	Reasons
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① O is mdpt of \overline{MQ}
 O is mdpt of \overline{NP}

① given

② $\angle MON \cong \angle QOP$

② vertical \angle 's \cong Thm

③ $\overline{MO} \cong \overline{QO}$

③ Def of mdpt

④ $\overline{NO} \cong \overline{PO}$

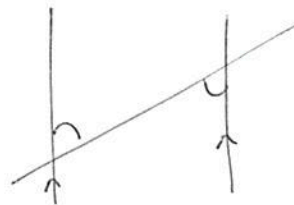
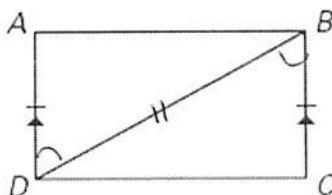
④ Def of mdpt

⑤ $\triangle MON \cong \triangle QOP$

⑤ SAS

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

Prove: $\triangle ABD \cong \triangle CDB$



Statements	Reasons
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① $\overline{AD} \cong \overline{CB}$
 $\overline{AD} \parallel \overline{CB}$

① given

② $\angle ADB \cong \angle CBD$

② AIA Thm

③ $\overline{DB} \cong \overline{BD}$

③ reflexive prop of \cong

④ $\triangle ABD \cong \triangle CDB$

④ SAS