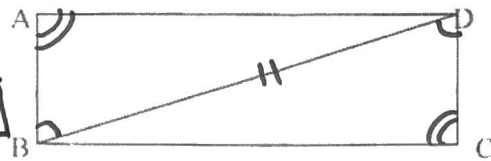


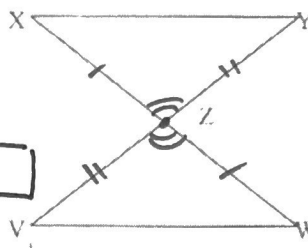
Complete each proof.

1. Given:  $\angle ABD \cong \angle BDC$ ;  $\angle A \cong \angle C$   
 Prove:  $\triangle ABD \cong \triangle CDB$



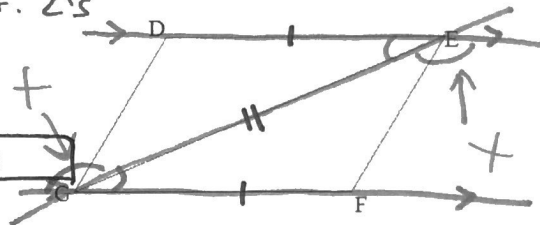
Statements	Reasons
① $\angle ABD \cong \angle BDC$	① given
② $\angle A \cong \angle C$	② given
③ $\overline{BD} \cong \overline{BD}$	③ Reflexive Property
④ $\triangle ABD \cong \triangle CDB$	④ AAS

2. Given: Z is a midpoint of  $\overline{VY}$   
 Z is a midpoint of  $\overline{XW}$   
 Prove:  $\triangle XZY \cong \triangle WZV$



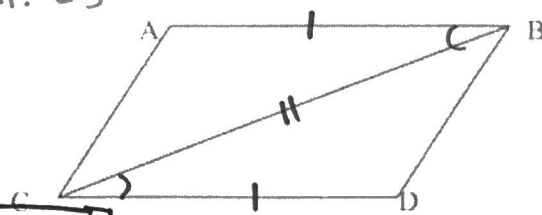
Statements	Reasons
① Z is mid. of $\overline{VY}$	① given
② Z is mid. of $\overline{XW}$	② given
③ $\overline{VZ} \cong \overline{YZ}$	③ Def. of midpoint
④ $\overline{XZ} \cong \overline{WZ}$	④ Def. of midpoint
⑤ $\angle XZY \cong \angle WZV$	⑤ Def. of vert. $\angle$ 's
⑥ $\triangle XZY \cong \triangle WZV$	⑥ SAS

3. Given:  $\overline{DE} \parallel \overline{GF}$ ;  $\overline{DE} \cong \overline{GF}$   
 Prove:  $\triangle GEF \cong \triangle EDG$



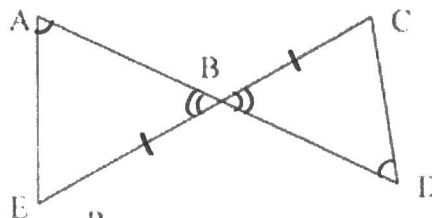
Statements	Reasons
① $\overline{DE} \cong \overline{GF}$	① given
② $\overline{DE} \parallel \overline{GF}$	② given
③ $\overline{GE} \cong \overline{GE}$	③ Reflexive Prop.
④ $\angle DEG \cong \angle FGE$	④ Alt. int. $\angle$ 's
⑤ $\triangle DEG \cong \triangle FGE$	⑤ SAS

4. Given:  $\overline{AB} \cong \overline{DC}$   
 $\angle ABC \cong \angle DCB$   
 Prove:  $\triangle ABC \cong \triangle DCB$



Statements	Reasons
① $\overline{AB} \cong \overline{DC}$	① given
② $\angle ABC \cong \angle DCB$	② given
③ $\overline{CB} \cong \overline{CB}$	③ Reflexive prop.
④ $\triangle ABC \cong \triangle DCB$	④ SAS

5. Given:  $\overline{BE} \cong \overline{BC}$ ;  $\angle A \cong \angle D$   
 Prove:  $\triangle ABE \cong \triangle DBC$



Statements	Reasons
① $\overline{BE} \cong \overline{BC}$	① given
② $\angle A \cong \angle D$	② given
③ $\angle ABE \cong \angle DBC$	③ vert. $\angle$ 's
④ $\triangle ABE \cong \triangle DBC$	④ AAS