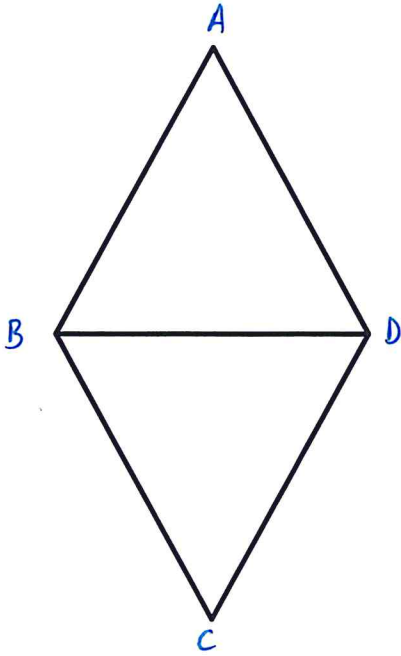


**Geometric Proofs**  
Emphasis on Congruence by Side – Angle – Side

Prove each of the following using Side – Angle – Side:

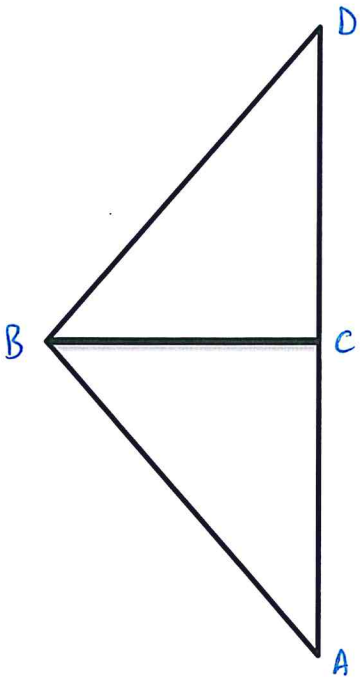
1. Given:  $\overline{AB} \parallel \overline{CD}$   
 $\overline{AB} \cong \overline{CD}$

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



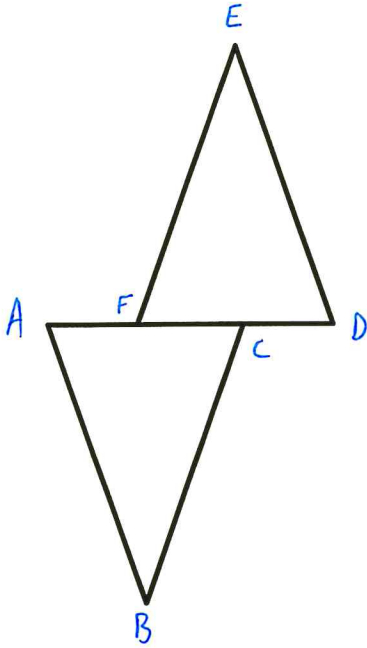
2. Given:  $\overline{BC} \perp \overline{AD}$   
C is the midpoint of  $\overline{AD}$

Prove:  $\triangle ABC \cong \triangle DBC$



3. Given:  $\overline{EF} \parallel \overline{BC}$   
 $\overline{EF} \cong \overline{BC}$   
 $\overline{AC} \cong \overline{DF}$

Prove:  $\triangle ABC \cong \triangle DEF$



4. Given:  $C$  is the midpoint of  $\overline{AD}$  &  $\overline{BE}$

Prove:  $\triangle ABC \cong \triangle DEC$

