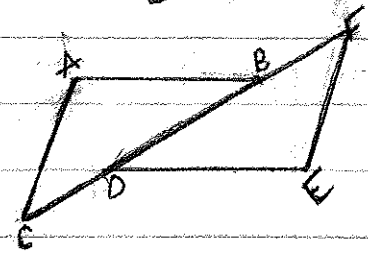


## Proof Number 4

Diagram:

Given:  $\overline{AB} \cong \overline{DE}$ ,  $\overline{AC} \cong \overline{EF}$ ,  $\overline{CD} \cong \overline{BF}$ Prove:  $\triangle ABC \cong \triangle DEF$  $\overline{AB} \cong \overline{DE}$ ,  $\overline{AC} \cong \overline{EF}$ ,  $\overline{CD} \cong \overline{BF}$  $DF = DB + BF$  $CB = DB + CD$  $CD = BF$  $CB = DB + BF$  $CB = DF$  $\overline{CB} \cong \overline{DF}$  $\triangle ABC \cong \triangle DEF$ 

Given

Segment Addition Postulate

Segment Addition Postulate

Definition of Congruent Segments

Substitution

Substitution

Definition of Congruent Segments

SSS Congruence Postulate