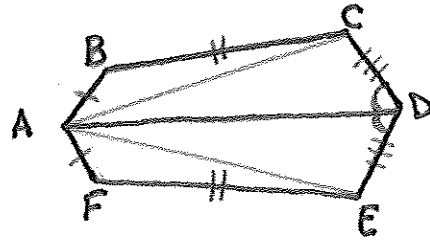


Given: $\overline{AB} \cong \overline{BF}$; $\overline{BC} \cong \overline{FE}$;
 $\overline{CD} \cong \overline{DE}$; $\angle CDA \cong \angle EDA$
 Prove: $\angle B \cong \angle F$
 (Hint: add 2 auxiliary lines)



1. $\overline{AB} \cong \overline{BF}$; $\overline{BC} \cong \overline{FE}$; $\overline{CD} \cong \overline{DE}$; $\angle CDA \cong \angle EDA$	1. Given
2. Draw auxiliary \overline{AC} and \overline{AE}	2. Through any two points is exactly one line.
3. $\overline{AD} \cong \overline{AD}$	3. Reflexive
4. $\triangle CDA \cong \triangle EDA$	4. SAS \cong
5. $\overline{AC} \cong \overline{AE}$	5. CPCTC
6. $\triangle BAC \cong \triangle FAE$	6. SSS \cong
7. $\angle B \cong \angle F$	7. CPCTC