The following proofs should be written in Two-column Format as a group. Mark the diagrams and list all the essential statements that lead up to the final conclusion. You may choose to do 5 of the 7. For extra credit you can successfully complete proof number 7.

1. Given: $\overline{A B} \| \overline{D C}, \angle \mathrm{~B} \cong \angle \mathrm{D}$

Prove: $\overline{B C} \cong \overline{D A}$

2. Given: $\overline{Q K} \cong \overline{Q A}, \overrightarrow{Q B}$ bisects $\angle \mathrm{KQA}$

Prove: $\overline{K B} \cong \overline{A B}$
3.


Given: $\overline{M N} \cong \overline{M P}, \quad \overline{N O} \cong \overline{P O}$,
Prove: $\angle N \cong \angle P$
4.


Given: $\angle \mathrm{H} \cong \angle \mathrm{J}, \quad \overrightarrow{O N}$ bisects $\angle \mathrm{JOH}$
Prove: $\overline{J N} \cong \overline{H N}$
5. Given: $\overline{B D} \perp \overline{A B}, \quad \overline{B D} \perp \overline{D E}, \overline{B C} \cong \overline{C D}$

Prove: $\angle \mathbf{A} \cong \angle \mathrm{E}$

6. Given: $\angle \mathrm{JFH} \cong \angle \mathrm{GHF}, \overline{F J} \cong \overline{G H}$,

Prove: $\overline{F G} \cong \overline{J H}$

7. Given: $\angle A E D \cong \angle C D E, \overline{A B} \cong \overline{C B}, \overline{A E} \cong \overline{C D}$, Prove: $\triangle A B E \cong \triangle C B D$


