Write a paragraph proof.
Given: $\overline{A B} \cong \overline{A D}$ and $\angle 1 \cong \angle 2$
Prove: $\triangle B A C \cong \triangle D A C$


Write a flowchart proof.

Given: $\overline{A C} \cong \overline{E C}$ and $m \| n$
Prove: $\triangle A B C \cong \triangle E D C$


Write a paragraph proof.
Given: $\angle A B C \cong \angle D E F, \overline{B C} \| \overline{E F}, \overline{A C} \cong \overline{D F}$.

Prove: $\triangle \mathrm{ABC}$ is congruent to $\triangle \mathrm{DEF}$


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


Determine whether there is enough information to prove that triangles $\triangle V W X$ and $\triangle Y X W$ are congruent. Explain.


Given: $\angle L \cong \angle J, \overline{K J} \| \overline{L M}$
Prove: $\angle L K M \cong \angle J M K$


Given: $\overline{P Q} \cong \overline{R Q}, \angle P Q S \cong \angle R Q S$
Write a proof (you can choose the type)
Prove: $\angle P \cong \angle R$


Given that polygon $A B C D E F$ is a regular hexagon, prove that $\overline{A C} \cong \overline{A E}$.
Write a two-column proof.


