## Hints for Proofs in Geometry $1^{\text {st }}$ Proof

1. Write what is given as Given
2. Write was is to be proved as Prove
3. Draw the picture and label what is given
4. Identify anything else from picture that can be used
5. Think about the definitions, postulates and theorems already introduced
6. Identify what you need to get to the conclusion

- $1^{\text {st }}$ step in proof, write was is given
- $2^{\text {nd }}$ step in proof, infer some relationship
- Last step, what you were trying to prove

Given: $\overline{A K D}, A D=A B$

Prove: $\quad A K+K D=A B$


Given: $\overline{X K Y}$
Prove: $\quad X K=X Y-K Y$

Given: $\overline{\text { OTE }}$
Prove: TE = OE - OT

Given: $\overline{\operatorname{RSTV}}, \mathrm{RT}=\mathrm{SV}$
Prove: RS = TV

