## Line Segment Proofs

Be sure to use "tick" marks to show the equalities before you start the proof.

1. Given: $\overline{A K D}, \mathrm{AD}=\mathrm{AB}$ Prove: $\mathrm{AK}+\mathrm{KD}=\mathrm{AB}$

2. Given: $\overline{R S T W}, \mathrm{RS}=\mathrm{TW}$ Prove: RT = SW

3. Given: $\overline{R S T W}, \mathrm{RS}=\mathrm{TW}$ PT bisects $\overline{S W}$
Prove: RS = ST

4. Given: $\overline{R S T}, \mathrm{RS}=\mathrm{AB}$

Prove: $\mathrm{AB}+\mathrm{ST}=\mathrm{RT}$

5. Given: $\overline{R O N Y}, \mathrm{RO}=\mathrm{NY}$

Prove: RN = OY


