Geometry R - Mr. Bo
Unit 5 - Day 6 HW

Name:
Date: $\qquad$

Use HL to complete the proofs (2-column, flow, or paragraph).

1. Given: $\angle R \& \angle T$ are right

$$
\begin{aligned}
& \overline{A P} \cong \overline{H P} \\
& \overline{A R} \cong \overline{H T}
\end{aligned}
$$

Prove: $\overline{A P}$ bisects $\overline{R T}$


2a. Given: $\overline{A D} \cong \overline{F C}$

$$
\begin{aligned}
& \overline{D E} \cong \overline{C B} \\
& \angle B \& \angle E \text { are right angles }
\end{aligned}
$$

Prove: $\triangle A B C \cong \triangle F E D$


2b. Add the necessary steps to your proof to prove: $\overline{B A} / / \overline{E F}$

3a. Given: $\angle R S H \cong \angle R A H$

$$
\overline{S P} \cong \overline{A P}
$$

Prove: $\angle S R H \cong \angle A R H$

Hint: Only 1 pair of congruent triangles is needed


3b. Is it now possible to conclude $\overline{H P R}$ bisects $\angle S R A$ ? Justify your reasoning.

4a. Given: $\overline{A T} \cong \overline{T S}$

$$
\overline{A M} \cong \overline{S M}
$$

Prove: $\triangle A T B \cong \triangle S T B$


4b. Add the necessary steps your proof to prove: $\overline{T B} \perp \overline{A S}$

