## Unit 3.2 - Segment Proofs "I Can Sheet"

Name: $\qquad$
Standards: PL.3, PL. 5
I Can...

- Use geometric postulates to determine if a statement is always, sometimes, or never true
- I can identify the postulates used in given scenarios (equality \& geometric postulates)
- I can determine a valid conclusion based on a given statement
- I can set up \& complete a 2-column proof using valid reasons \& logical order

Items in bold should be turned in to me or put in your binder.

| book assignment (postulates) |
| :---: |
| ws \#1 (intro to proofs) |
| ws \#2 (2-column proofs) |
| extra video |
| extra ws |
| extra book problems |
| pre-mc |
| Mastery check |
|  |

Write a conclusion and justification for the given statement.

1. Given: $T$ is the midpoint of $\overline{S R}$

Conclusion: Reason:
2. Given: $A E=Y P$

Conclusion:
Reason:

Determine if the statement is always, sometimes, or never true. Justify your answer.
3. The intersection of two planes contains at least 2 points.

State the postulate that can be used to show each statement is true.
4. Points $L$ and $T$ and line $m$ lie in the same plane.
5. Line $m$ and line $S T$ intersect at $T$.


Complete the two column proofs below.
6.

Given: $\overline{A B} \cong \overline{D E}$
$B$ is the midpoint of $\overline{A C}$.
$E$ is the midpoint of $\overline{D F}$.
Prove: $\overline{B C} \cong \overline{E F}$
Proof:
Statements
a.
b. $A B=D E$
c. $-B C=D E$
d. $B C=E F$
e. $B C=$
f.


Reasons
a. Given
b.
c. Definition of Midpoint
d. $\qquad$
e.
f. $\qquad$
7.

Given: $S T=R N ; I T=R U$
Prove: $S I=U N$


