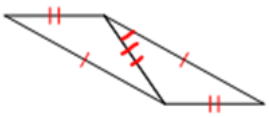
4.2 PRACTICE

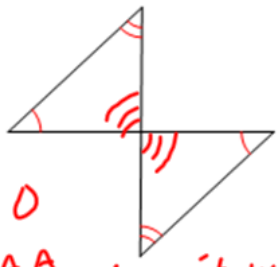
State if the two triangles are congruent. If they are, state why.

1.



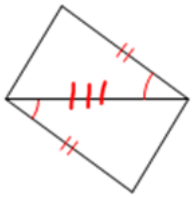
SSS

2.



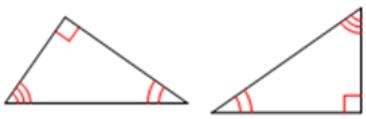
NO
AAA doesn't work!

3.



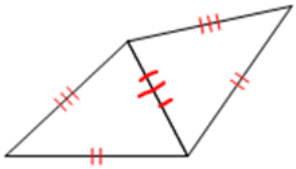
SAS

4.



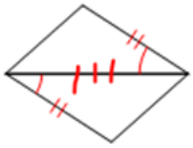
NO!
AAA X

5.



SSS

6.

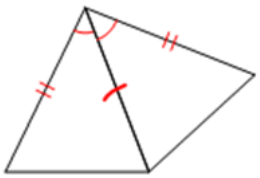


SAS

7.

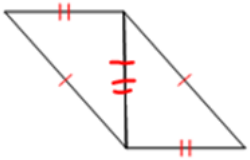
NO!
X

8.



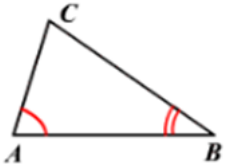
SAS

9.

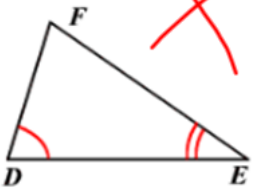


SSS

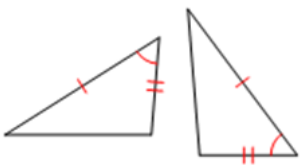
10.



NO!
X

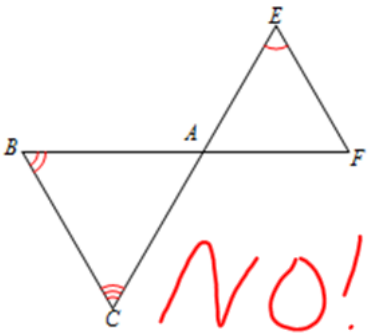


11.



SAS

12.

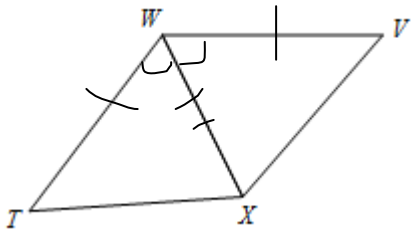


NO!
X

Mark the picture. Answer the question. Prove it.

13.
Given: $\angle TWX \cong \angle VWX$
$\overline{TW} \cong \overline{WV}$

Prove: $\Delta XWV \cong \Delta XWT$



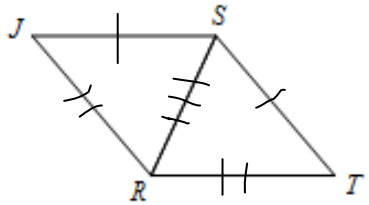
WHY ARE THE TWO TRIANGLES CONGRUENT? **SAS**

STATEMENTS	REASONS
1. $\angle TWX \cong \angle VWX$ $\overline{TW} \cong \overline{WV}$	1. Given
2. $\overline{WX} \cong \overline{WX}$	2. Reflexive Property
3. $\Delta XWV \cong \Delta XWT$	3. SAS

Mark the picture. Answer the question. Prove it.

14.
Given: $\overline{ST} \cong \overline{SJ}$
$\overline{JR} \cong \overline{TR}$

Prove: $\Delta RST \cong \Delta RSJ$



WHY ARE THE TWO TRIANGLES CONGRUENT? **SSS**

STATEMENTS	REASONS
1. $\overline{ST} \cong \overline{SJ}$ $\overline{JR} \cong \overline{TR}$	1. Given
2. $\overline{SR} \cong \overline{SR}$	2. Reflexive Property
3. $\Delta RST \cong \Delta RSJ$	3. SSS