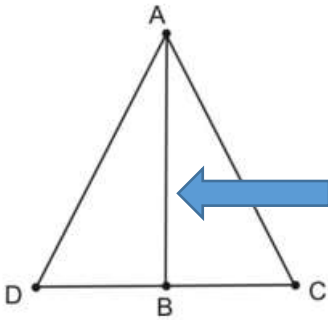


## UNIT 4 LESSON 3 – TRIANGLE CONGRUENCY STATEMENTS

Each congruence statement refers to the corresponding parts of the triangles.

CPCTC - Corresponding Parts of Congruent Triangles are Congruent

### Reflexive Property of Congruence

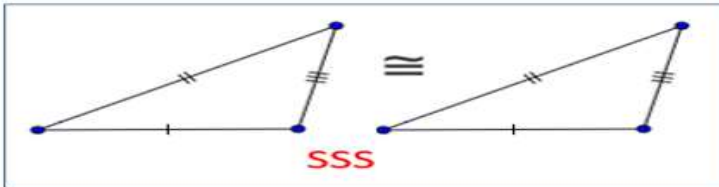


**THE TRIANGLES SHARE A SIDE!!!**

In the diagram above, you can say that the shared side of the triangles ( $\overline{AB}$ ) is congruent because of the reflexive property. Or in other words,  $\overline{AB} \cong \overline{AB}$ .

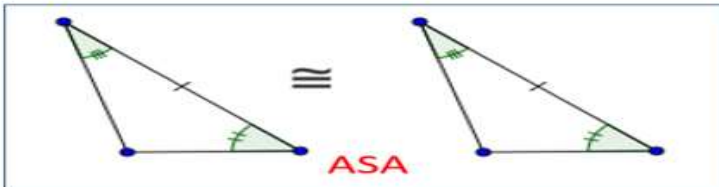
One way to remember the **Reflexive Property** is that the word "reflexive" has the same root as "reflection."

### TRIANGLE CONGRUENCY STATEMENTS



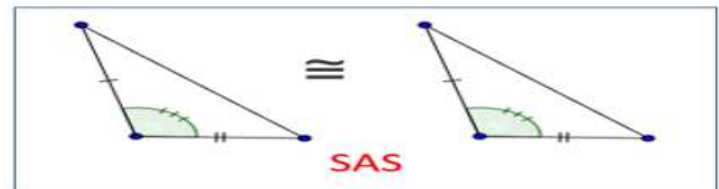
#### **SIDE, SIDE, SIDE**

Corresponding sides in both triangles are congruent.



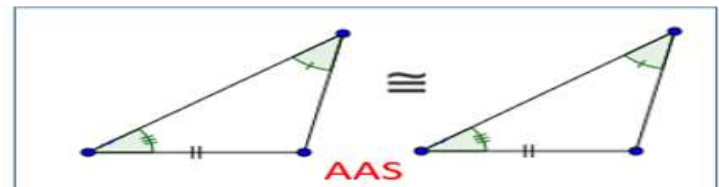
#### **ANGLE, SIDE, ANGLE**

Two angles and the side in between those angles are congruent in both triangles.



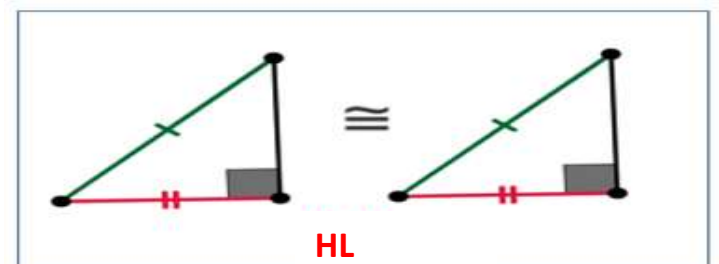
#### **SIDE, ANGLE, SIDE**

Two corresponding sides in both triangles are congruent. The angles formed by these sides are also congruent.



#### **ANGLE, ANGLE, SIDE**

Two corresponding angles in both triangles are congruent. Corresponding sides NOT in between those angles are also congruent.

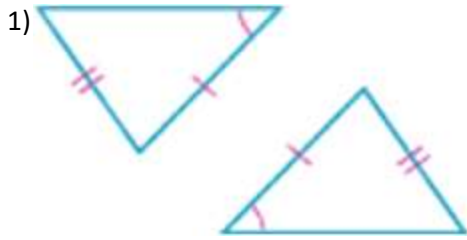


#### **HYPOTENUSE, LEG**

#### **\*\*Use only with Right Triangles**

The hypotenuse and corresponding leg of both right triangles are congruent.

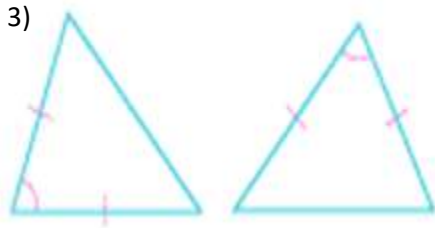
# SSS, SAS, ASA, AAS, HL, or Neither?



Neither



Neither



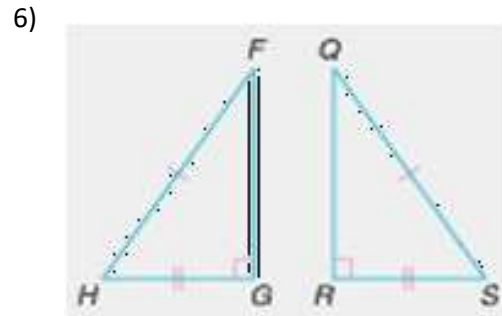
SAS



SAS \*\*reflexive property



ASA



HL