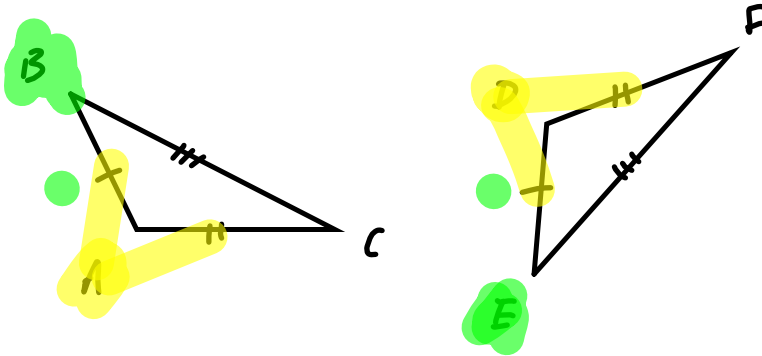


5.5 SSS Congruence Theorem

Geometry Lesson 5.5

SSS Congruence & "HL" Congruence.



if all 3 sides of one triangle are the same as all 3 sides of a 2nd triangle. The 2 triangles are congruent.

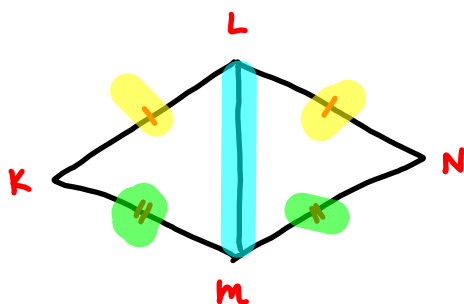
Congruence Statement:

$$\triangle ABC \cong \triangle DEF$$

Take a look at \overline{AB} . It should be the same as \overline{DE} .
 \overline{BC} should = EF and so on.

5.5 SSS Congruence Theorem

Ex:



are the Triangles congruent?

These 2 triangles have all their sides matching.
The shared side is the 3rd congruent side.

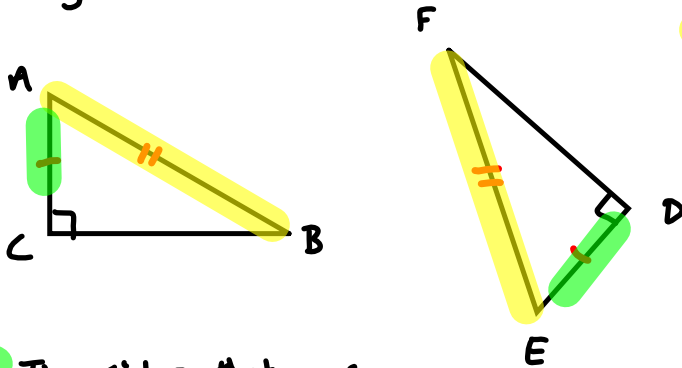
Congruence Statement:

$$\triangle MKL \cong \triangle MNL$$

"HL" Congruence

Hypotenuse - Leg Congruence

If 2 right triangles have the same (congruent) hypotenuses & one "leg", they are congruent triangles.



Hypotenuse:

Longest side of a Right Δ .
The side opposite the Right angle.

Leg: The sides that are not the Hypotenuse.

So these 2 Triangles are congruent.

Congruence Statement:

$$\triangle FED \cong \triangle ABC$$

HW: Pg 240 # 3-10