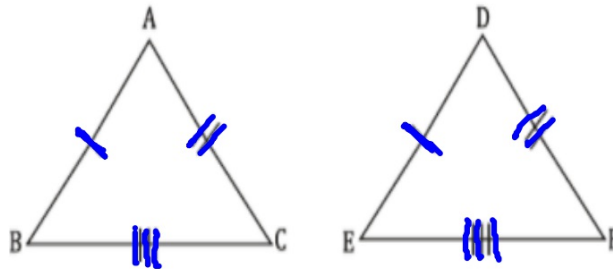


Guided Notes: Triangle Congruence Theorems

The triangle congruence theorems are ways to prove that triangles are congruent by using information about some of their pieces.

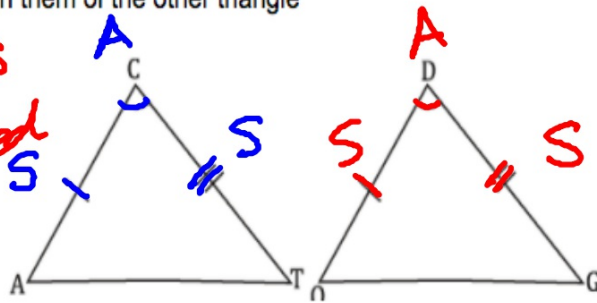
** Order Matters*

Side, Side, Side (SSS) - all three sides of one triangle are congruent to all three sides of the other triangle



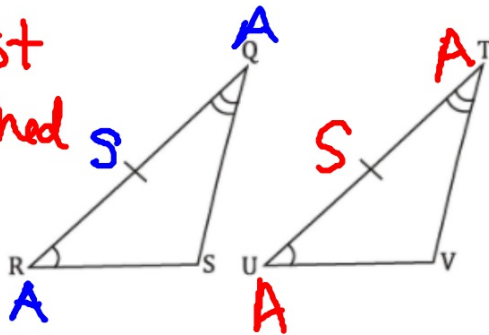
Side, Angle, Side (SAS) – two sides and the angle between them of one triangle are congruent to two sides and the angle between them of the other triangle

• Angle is sandwiched by sides

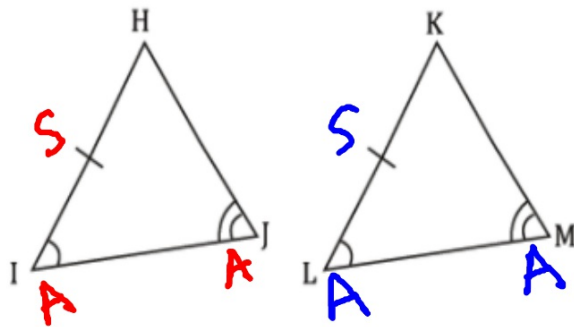


Angle, Side, Angle (ASA) – two angles and the side between them of one triangle are congruent to two angles and the side between them of the other triangle

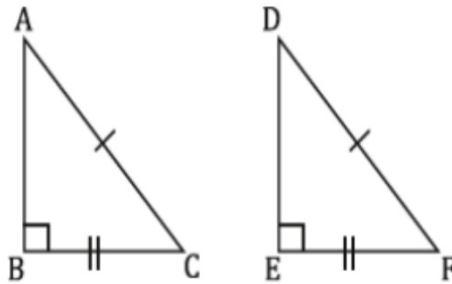
• Side must be sandwiched by angles



Angle, Angle, Side (AAS) – two angles and a side not between them of one triangle are congruent to two angles and a side not between them of the other triangle



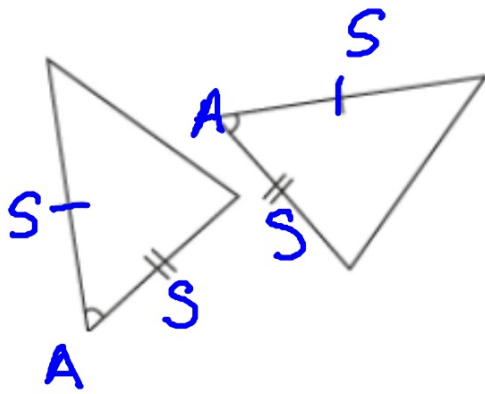
Hypotenuse, Leg (HL) – the hypotenuse and a leg of one right triangle are congruent to the hypotenuse and a leg of the other right triangle



** Right Triangle Only*

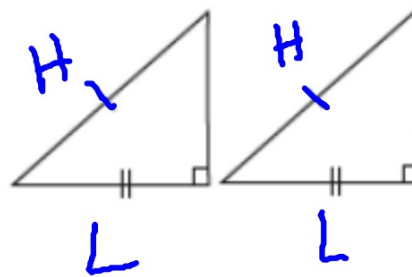
The Triangles are Congruent by which Theorem?

EX1



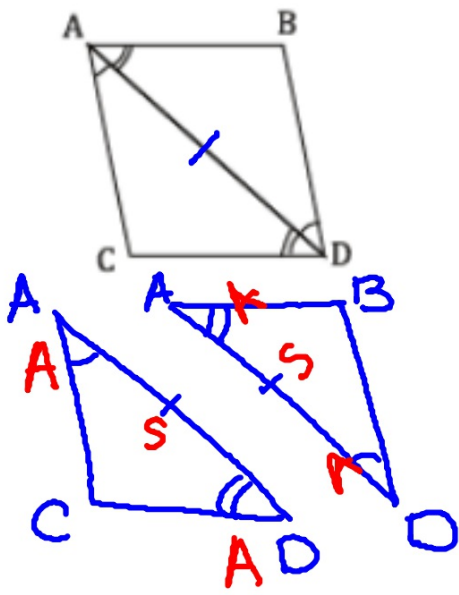
Yes, SAS

EX2



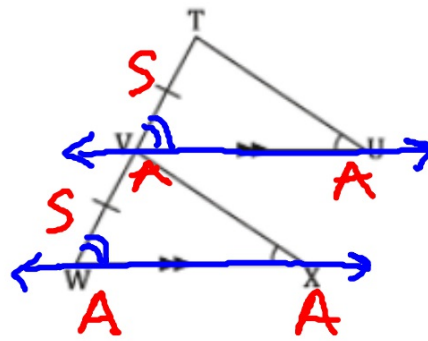
Yes, HL

EX3



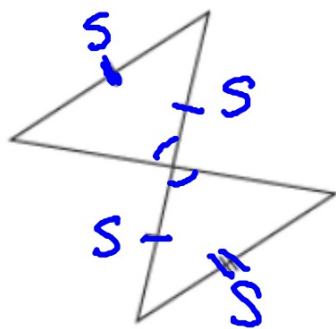
Yes, ASA

EX4



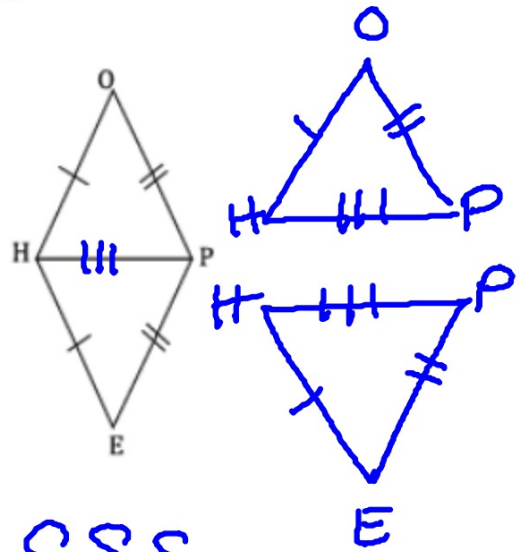
Yes, AAS

EX5



No

EX6



Yes, SSS