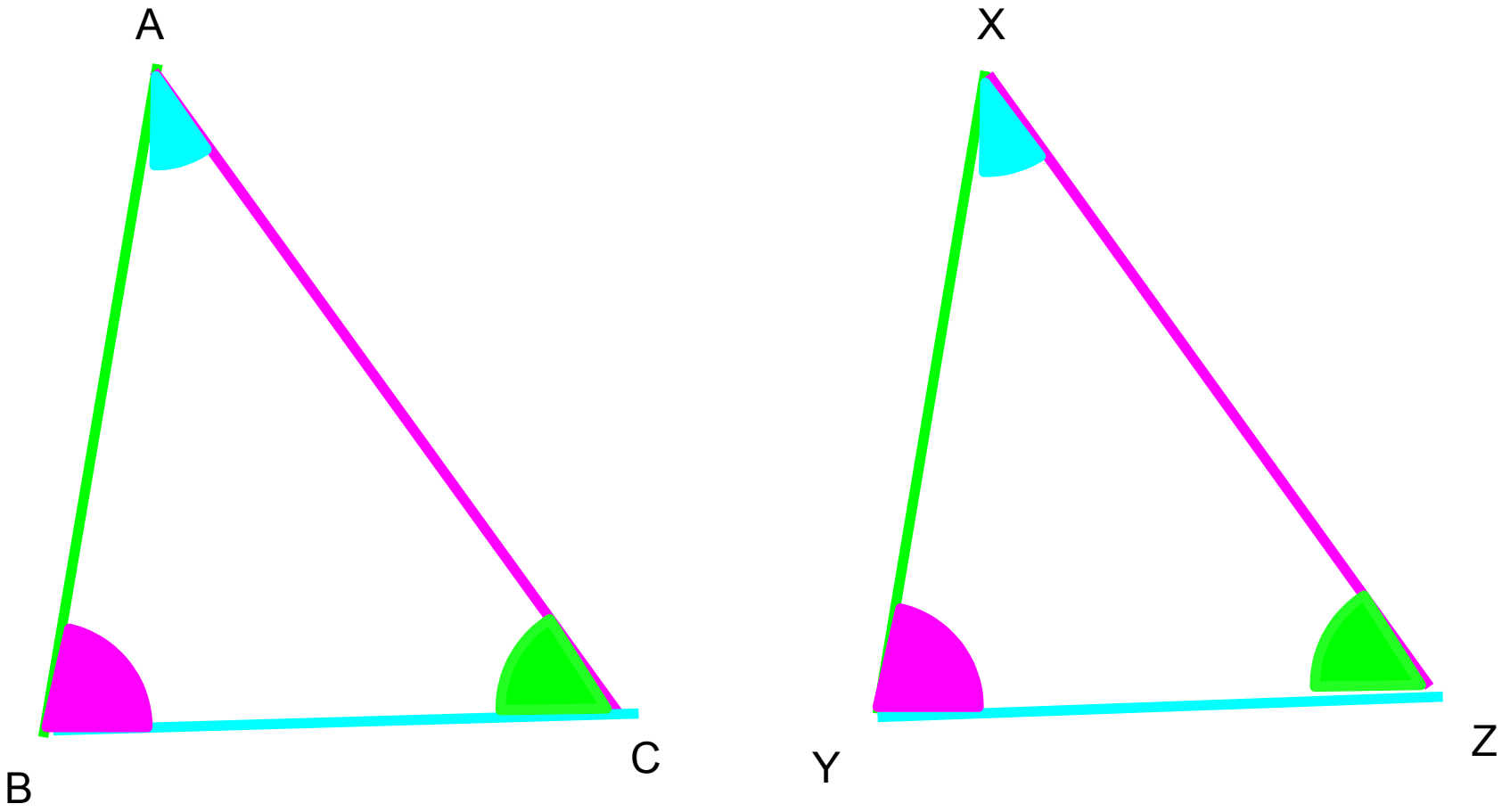
Congruent Triangles

- If given two similar triangles , the ratio of two corresponding sides is 1, then the two triangles are known as congruent triangles.

- In other words we say two triangles are congruent if the corresponding angles and the corresponding sides are equal.



Note that in ΔABC and ΔXYZ
$\angle ABC = \angle XYZ$, $\angle BAC = \angle YXZ$ $\angle ACB = \angle XZY$
Also $\ell AB = \ell XY$, $\ell BC = \ell YZ$ and $\ell AC = \ell XZ$

Hence ΔABC and $\Delta XYZ$are congruent.
Denoted by $\Delta ABC \equiv \Delta XYZ$.

CONGRUENT TRIANGLES ALWAYS

Type of Triangle	Sides of both the Triangle	Angles of both the Triangle
SSS	*All three sides are equal*	
SAS	*2 sides are equal*	*The included Angle is equal*
ASA	*Included side is equal*	*Two angles are equal*
AAS	*Non- included side are equal*	*Two angles are equal*
Hyp-S	*Hypotenuse and a side are equal*	*Right angled triangle*

Reference

For more explanations and Diagrams you can refer

http://argyll.epsb.ca/jreed/math9/strand3/triangle_congruent.htm