<u>Definition of congruency</u>

A triangle (or indeed any two dimensional shape) is deemed congruent to another if it has **the same shape and the same size**.
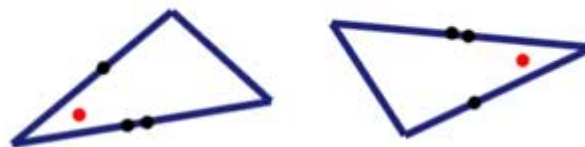
The second triangle can be <u>rotated,</u> <u>reflected</u> or <u>translated</u> in any way.

The first triangle must be able to fit over the second triangle exactly.

<u>Tests for congruency</u> - **S**ide **A**ngle **S**ide (SAS)
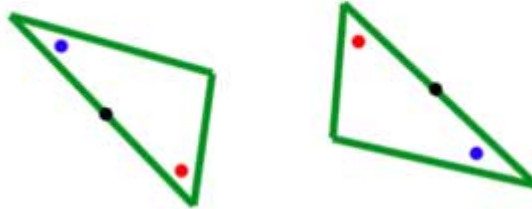
<u>two sides + the included angle</u>

are common to both

<u>Tests for congruency</u> - **S**ide **S**ide **S**ide (SSS)

<u>all three sides</u> are common to both triangles

Tests for congruency - **A**ngle **S**ide **A**ngle (ASA)

two angles and a side are common to both triangles

Tests for congruency - **R**ight angle **H**ypotenuse and one **S**ide (RHS)

right-angle and the hypotenuse + one other side

are common to both