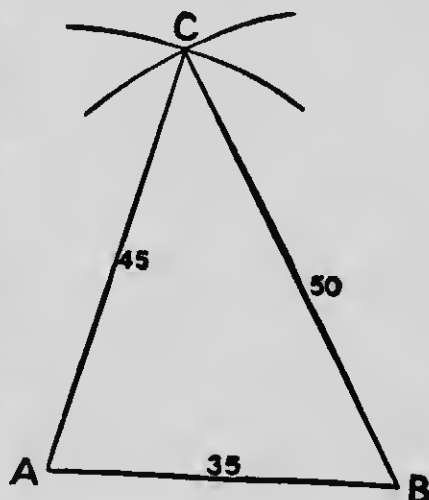


In each case compare the magnitudes of the sides adjacent to the equal angles.

The result of our observations is that **if two angles of a triangle are equal, the sides opposite to these angles are also equal.**

In the case of each of the above triangles measure the size of the angle at the top, or **vertex**, of the triangle, and find the total number of degrees in the three angles of each triangle.

4. Take a line **AB** of length 35 millimetres, and with centres **A** and **B**, and radii 45 and 50 millimetres respectively, describe portions of circles, so that they intersect at **C**. Join **CA** and **CB**. We have thus a triangle **CAB** whose sides are unequal, called a **scalene triangle**.



Construct the following triangles:

With sides 3, 5 and 6 inches.

With sides 70, 80 and 100 millimetres.

With sides $3\frac{1}{2}$, $4\frac{1}{2}$ and $2\frac{1}{2}$ inches.

With the bevel lay off three angles adjacent to one another, equal to the angles of each triangle, in the way indicated in the adjacent figure; and determine the positions of the initial and final lines, **LM**, **LK**, with respect to one another.

