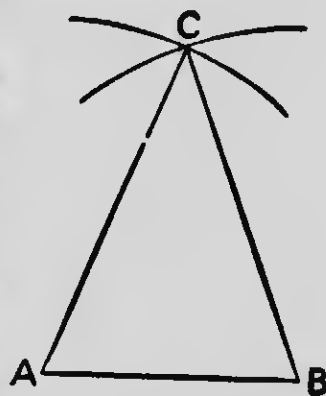


angle. Applying the ruler, it will be found that **CA** and **AB** are in the same straight line. Hence it appears that the three angles of any equilateral triangle are together equal to 180° , and any one of the angles in such a triangle is 60° .

Measure the angles in several of the equilateral triangles with the protractor to verify this.

2. Take a line **AB** of, say, 25 millimetres in length, and with centres **A** and **B** describe portions of circles intersecting as indicated at **C**, each circle having the same radius, say 35 millimetres. Draw lines from **C** to **A** and **B**. Then the triangle **CAB** has two sides equal. A triangle with two of its sides equal is called an **isosceles** triangle.



Adjusting the bevel to the angles **CAB** and **CBA**, compare their magnitudes.

Compare also the sizes of these angles by accurately cutting the triangle out of the paper, and placing the triangle reversed in the vacant space left in the paper, so that the angle **B** rests in the space **A**.

Compare also the sizes of these angles by folding the triangle along the line from **C** to the middle of **AB**.

Construct the following isosceles triangles:

Base 1 in., each side 2 in.

Base 3 in., each side 2 in.

Base $2\frac{1}{2}$ in., each side $2\frac{1}{4}$ in.

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