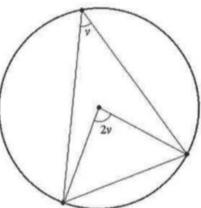
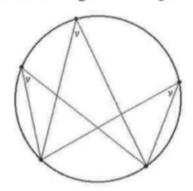
Angles on a chord

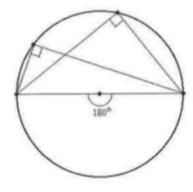
There are many interesting facts about circles. A very useful fact concerning angles in circles is that, if a chord is drawn in a circle, the angle at the centre of the circle on that chord is twice the size of any angle at the circumference on the same chord:



Angles on the same arc and Triangle with one side which is a diameter

This means that all angles standing on the same arc (or chord) are equal. It also means that all angles standing on a diameter are 90° .

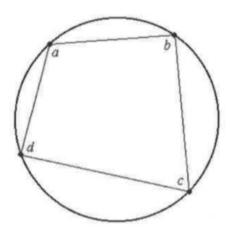




Cyclic quadrilaterals

A quadrilateral that has its four vertices (corners) on the circumference of a circle is called a *cyclic quadrilateral*.

The sum of two opposite angles of a cyclic quadrilateral is 180°:



$$a + c = 180^{\circ}$$
 and $b + d = 180^{\circ}$

Tangent to a circle, makes right angle triangle with the radius

