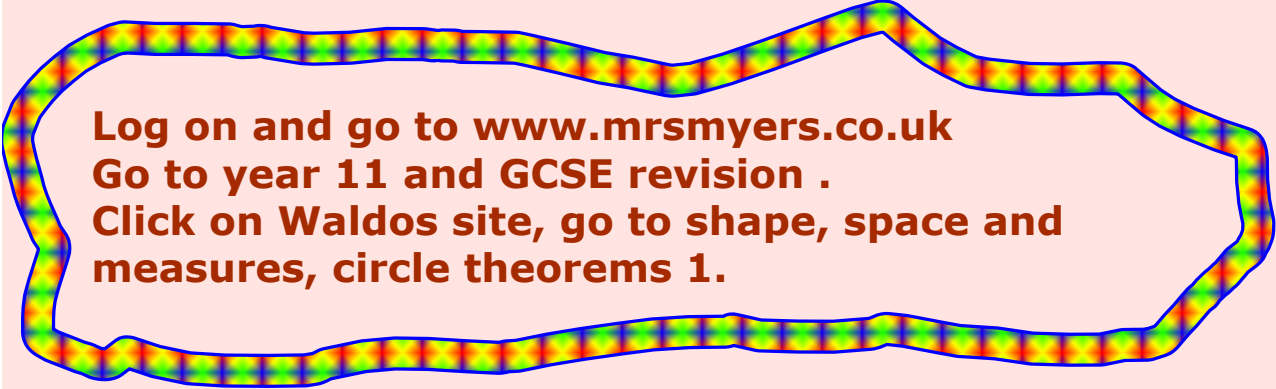
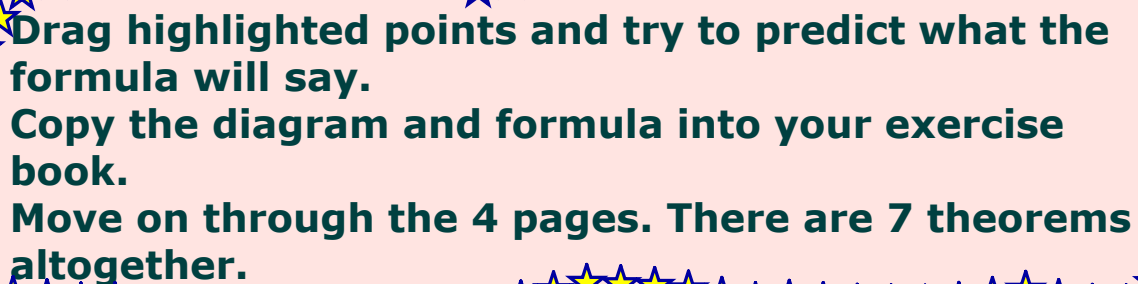


Circle Theorems using Geometer's sketchpad



**Log on and go to www.mrsmyers.co.uk
Go to year 11 and GCSE revision .
Click on Waldos site, go to shape, space and
measures, circle theorems 1.**



**Drag highlighted points and try to predict what the
formula will say.
Copy the diagram and formula into your exercise
book.
Move on through the 4 pages. There are 7 theorems
altogether.**

Circle theorem 1: Angles in a cyclic quadrilateral.

Circle Theorem 2: Angles in the same segment.

Circle theorem 3: Angle in a semi-circle.

Circle Theorem 4: Angles sharing the same arc.

**Circle theorem 5: The angle between a tangent and a
radius.**

Circle Theorem 6: The Alternate Segment theorem

**Circle Theorem 7: The length of tangents from a point
to the circle.**

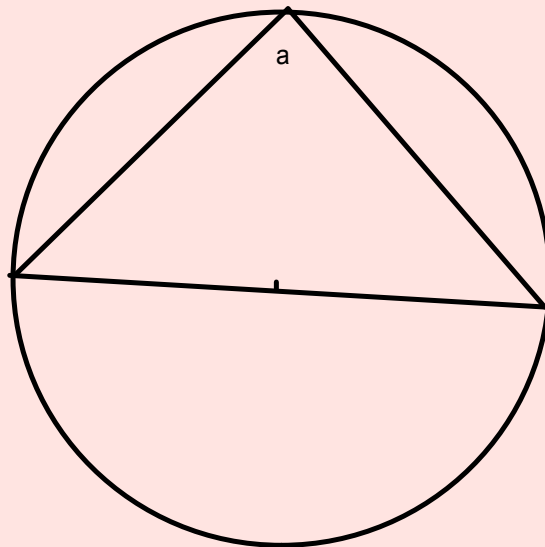
You will need a
protractor
pencil
ruler
pair of compasses



Circle Theorems

Circle theorem 1:

The angle in a semi-circle is a right angle

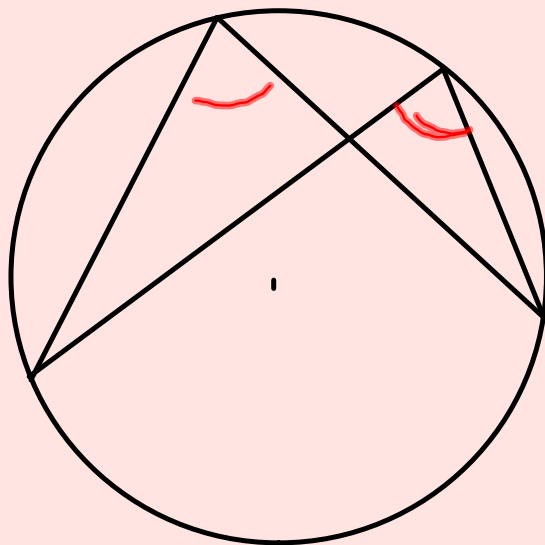


Circle Theorems

Circle theorem 2 :

The angles on the circumference (from the same points)
are ...*equal*.....

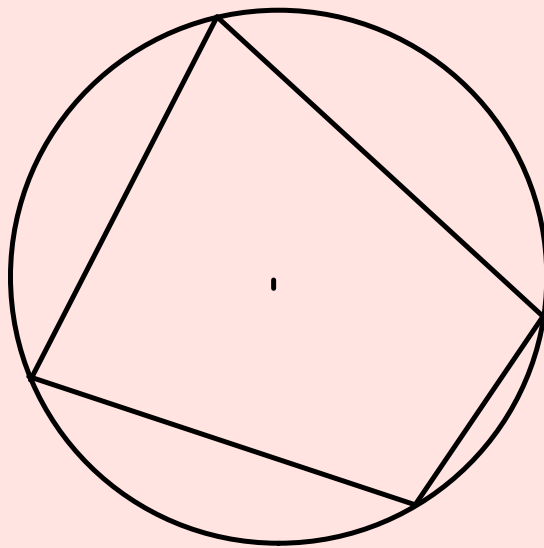
*subtended on the
same arc*



Circle Theorems

Circle theorem 3 :

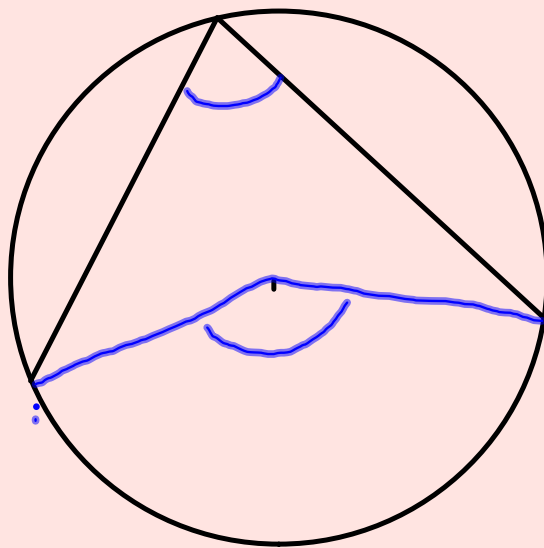
Opposite angles in a cyclic quadrilateral *sum 180°*



Circle Theorems

Circle theorem 4 :

The angle on the circumference is^{half} the angle at the centre subtended on the same arc.

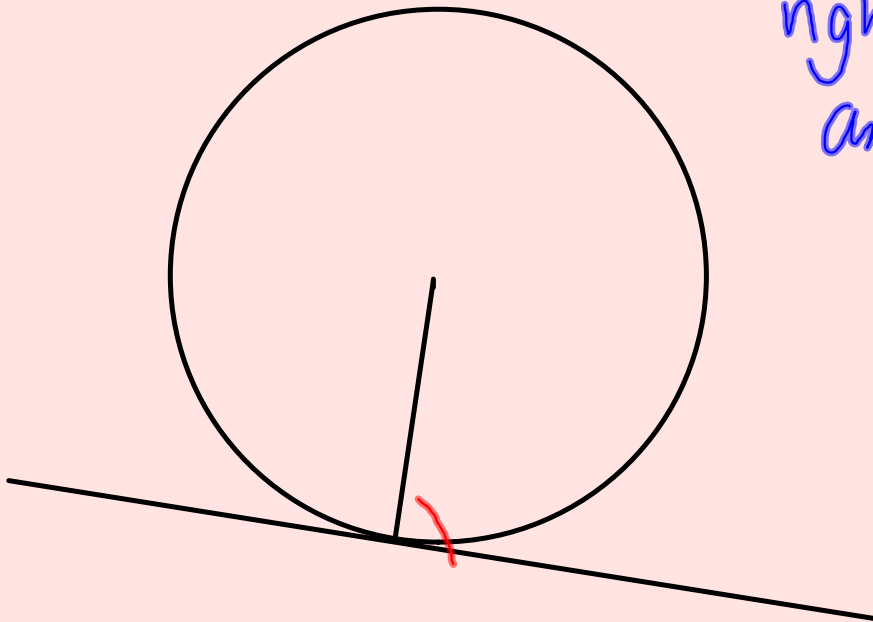


Circle Theorems

Circle theorem 5 :

The angle between a tangent and a radius is.....a.....

right
angle

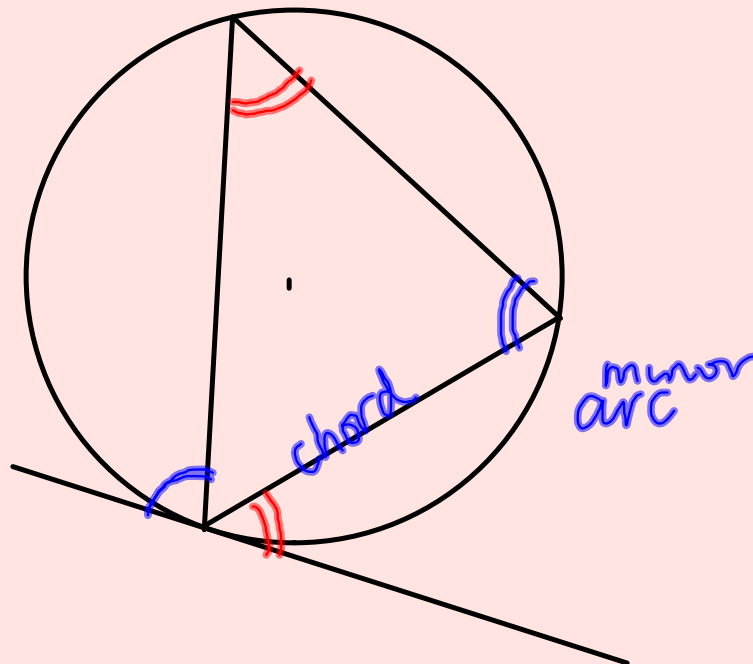


Circle Theorems

Circle theorem 6 :

The Alternate Segment theorem:

In a circle the angle between a tangent and a chord is equal to the angle in the alternate segment.



Circle Theorems

Circle theorem 7 :

The length of tangents from a point to the circle.... are equal

