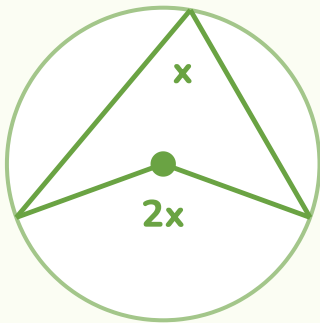
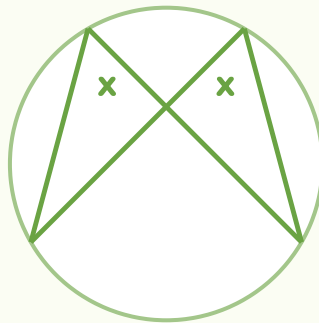


Circle theorems



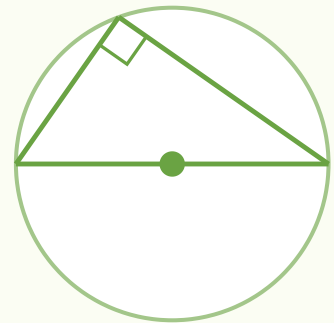
Angle at the center
Twice the angle at the edge

both stand on the same arc



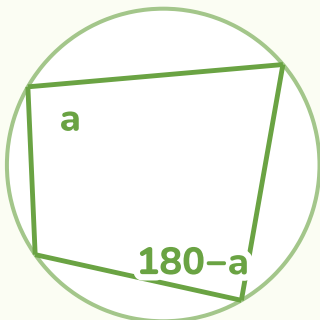
Same segment
Same arc, same angle

move the point — it does not change



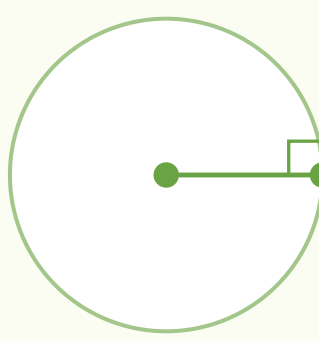
Angle in a semicircle
A diameter gives 90°

wherever the point sits



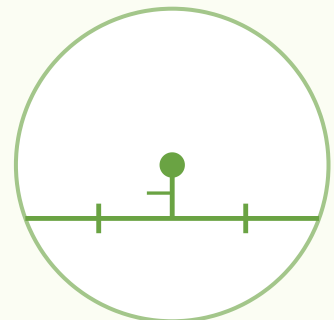
Cyclic quadrilateral
Opposite angles add to 180°

all four corners on the edge



Tangent and radius
A tangent meets it at 90°

touches once, never crosses



Perpendicular to a chord
It cuts the chord in half

the two ticks are equal

An angle is fixed by the arc it stands on, not by where its point sits. That is why the same arc gives the same angle from anywhere on the circle, and why a diameter — half the circle — always gives 90° .