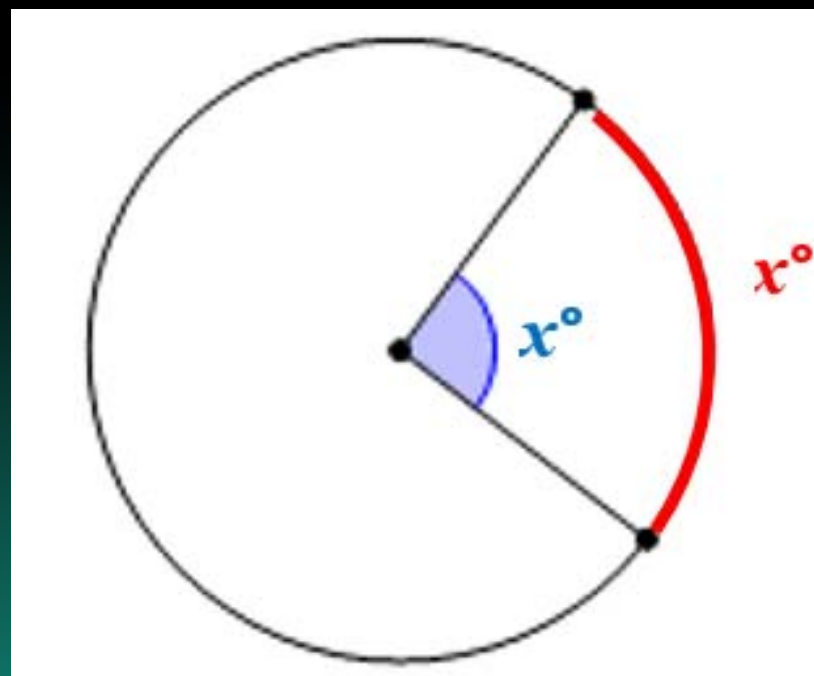


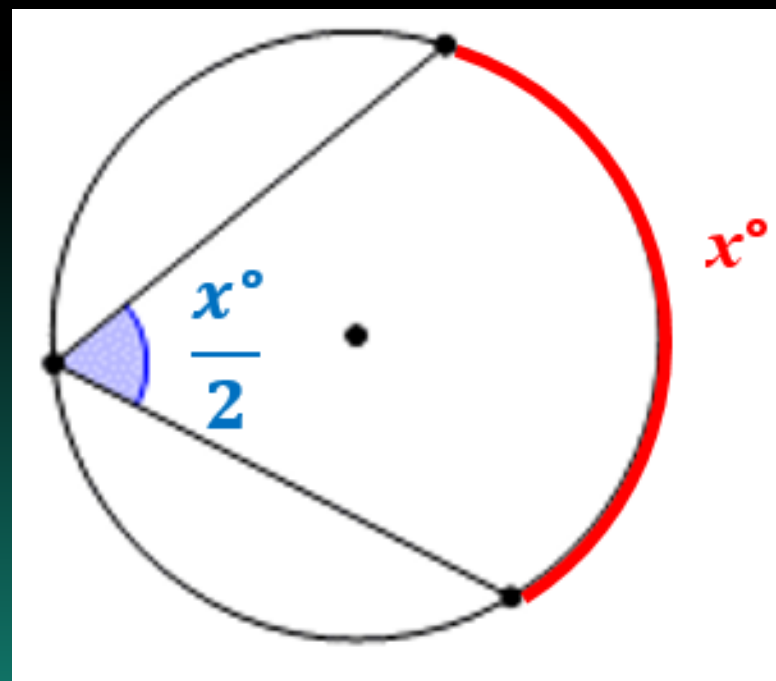
Circle Conjecture #1

The measure of a central angle is the same as the degree measure of the arc it intercepts.



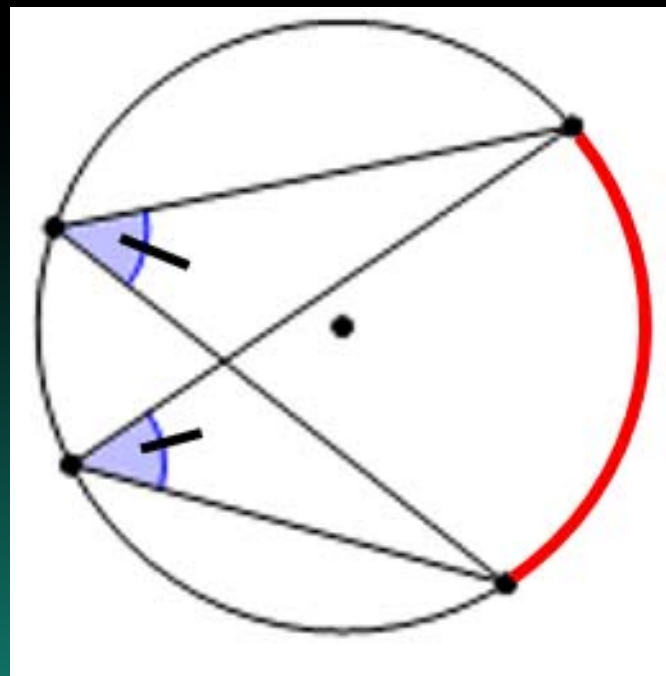
Circle Conjecture #2

The measure of an inscribed angle in a circle is half the measure of the arc it intercepts.



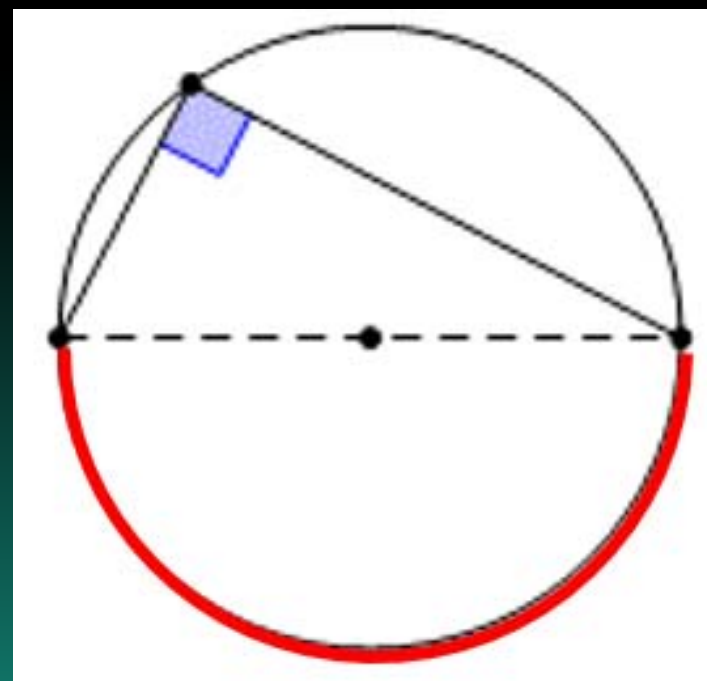
Circle Conjecture #3

Inscribed angles that intercept the same arc are congruent.



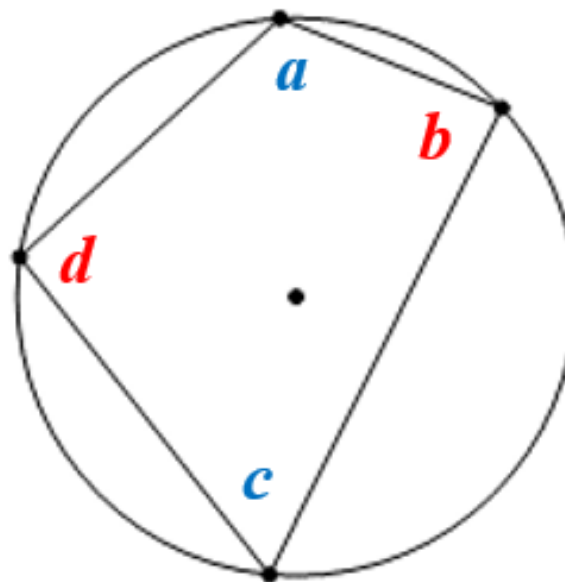
Circle Conjecture #4

Angles inscribed in a semicircle are right angles.



Circle Conjecture #5

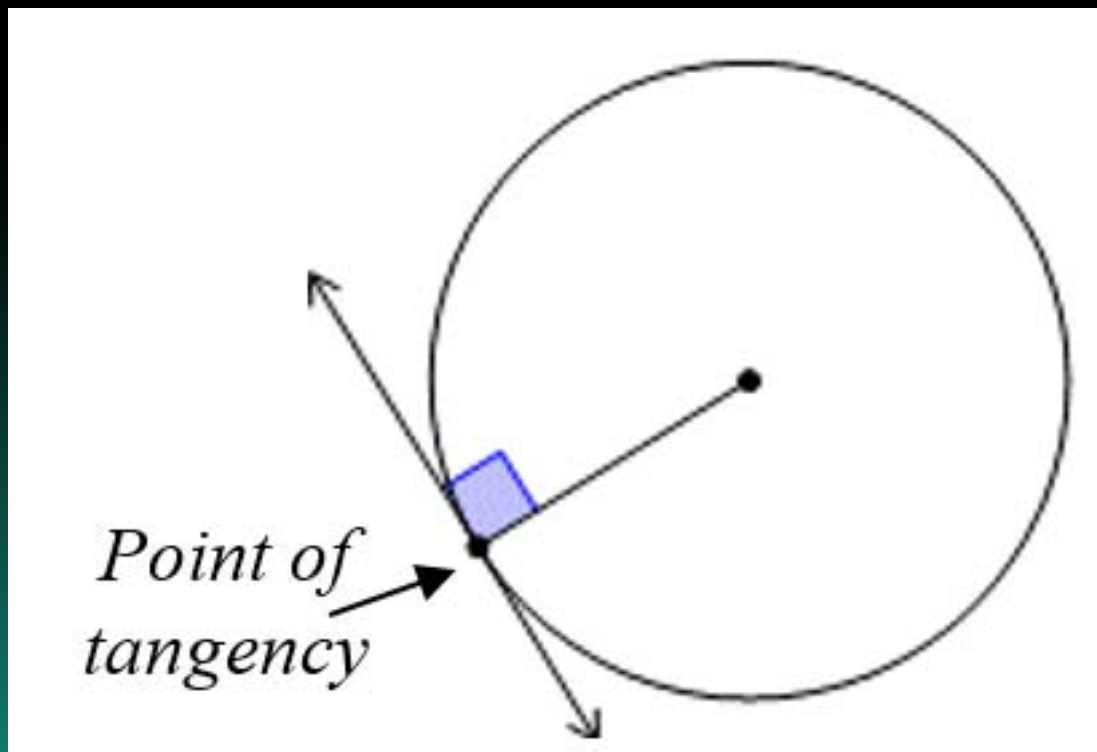
The opposite angles of a quadrilateral inscribed in a circle are supplementary.



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

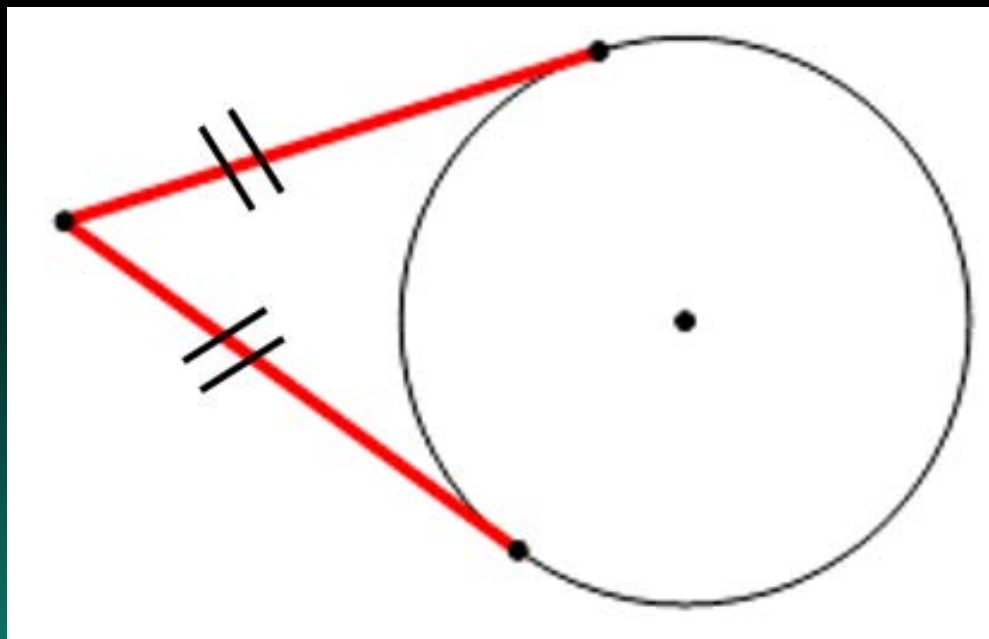
Circle Conjecture #6

A tangent to a circle is perpendicular to the radius drawn to the point of tangency.



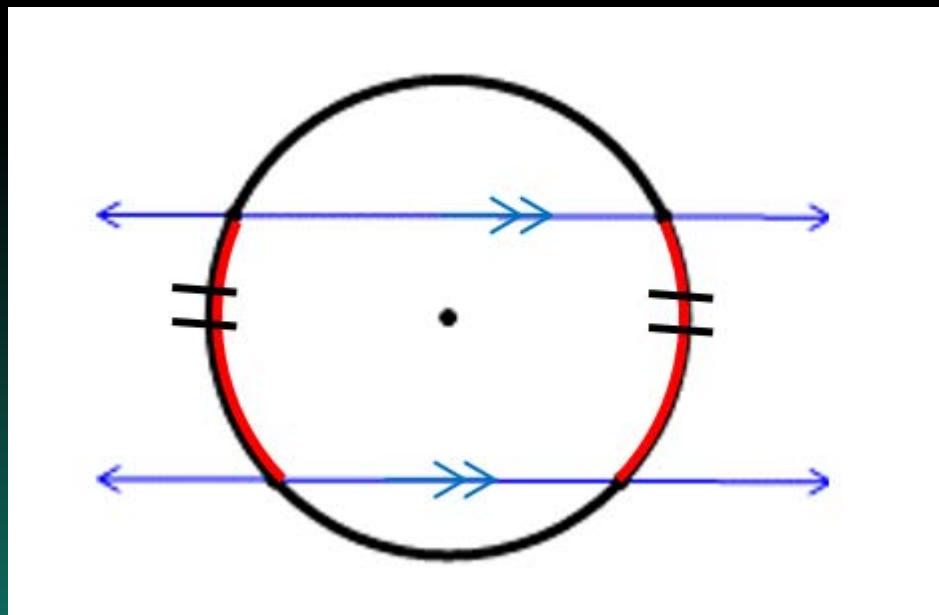
Circle Conjecture #7

Tangent segments to a circle from a point outside the circle are congruent.



Circle Conjecture #8

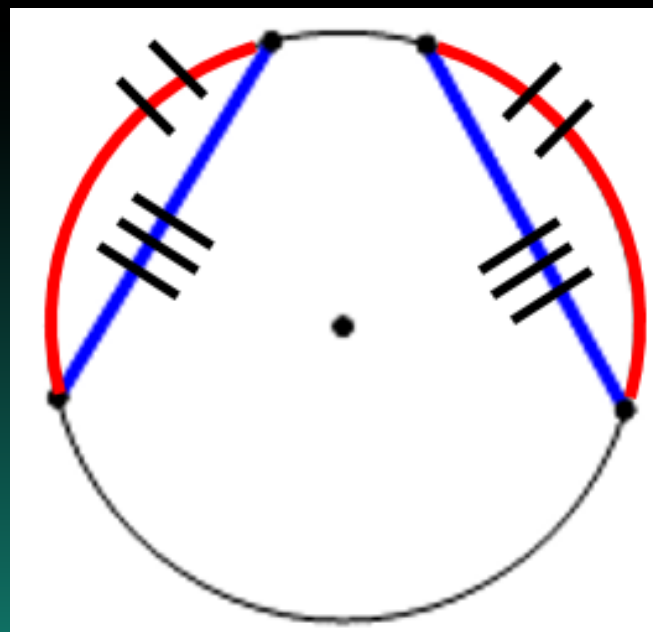
Parallel lines intercept congruent arcs on a circle.



Circle Conjecture #9 and #10

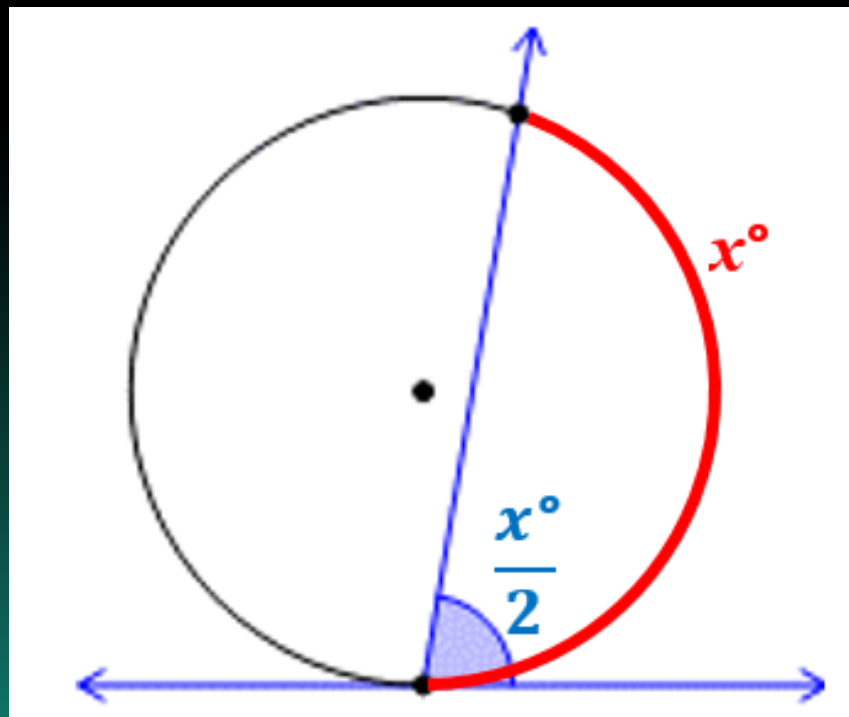
If two chords are congruent, then their arcs are congruent

Converse: If two arcs are congruent, then their chords are congruent



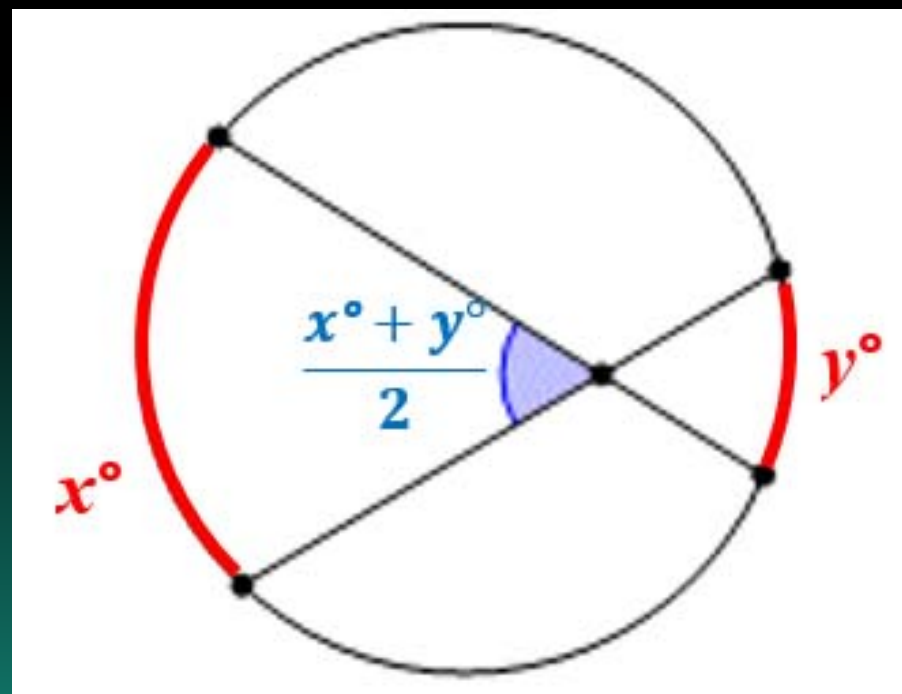
Circle Conjecture #11

An angle formed by a tangent ray and a secant is always half the measure of the arc it intercepts



Circle Conjecture #12

The measure of an angle formed by two intersecting chords is the average of the measures of the arcs that are intercepted by it and its vertical angle.



Circle Conjecture #13

The measure of an angle formed by two secants that intersect outside of a circle is half the difference of the arcs intercepted by it.

