VOCABULARY:

Arc	A connected set of points of the circle. An unbroken part of the circle. An arc of X° subtends a central angle of measure X°.
Area of circle	The area of the circular region (portion of plane bounded by the circle). **$A = \pi r^2$**
Central angle	An angle whose vertex is at the center of a given circle. See ∠AOC in fig.1.
Circle	The set of points in a (given) plane whose distance from a (given) point (referred to as the "center") is a given positive quantity (referred to as the "radius").
Circumference	The perimeter of a circle **$C = 2\pi r$** where **r** is the radius.
Chord	Line segment joining two points of the circle
Diameter	A chord through the center. A chord of maximum length for the circle.
Inscribed angle	An angle whose vertex lies on a given circle, whose rays intersect the circle in two additional points. See ∠ABC in figure 1, or ∠BAC in figure 2.
Radius	A line segment joining the center of a given circle with a point of the circle. Also the distance from the center of the circle to the points of the circle.
Sector	The portion of a circular region bounded by the circle and a central angle of the circle.
Segment	The portion of a circular region bounded by the circle and a chord of the circle.
Tangent	A line which lies outside the circle except for passing through one point of the circle. The tangent line "just bumps up against the circle".

Fig 1

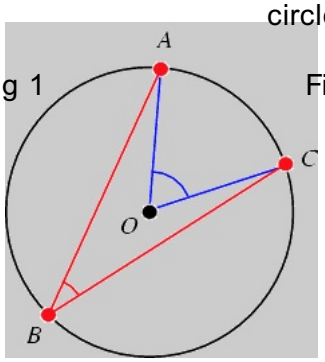


Fig 2

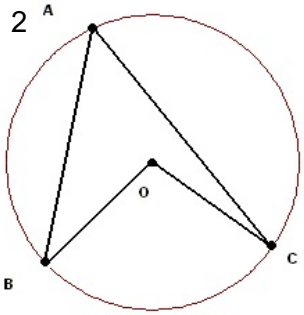


Fig 3

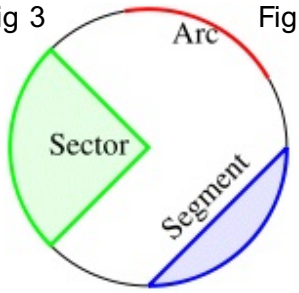
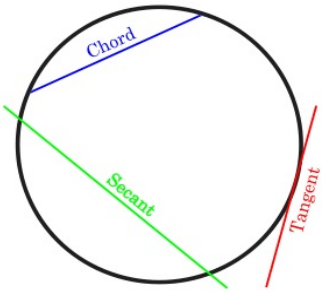


Fig 4



FACTOIDS:

The degree measure of a central angle is by definition the same as the degree measure of the corresponding arc of its circle.

The measure of an inscribed angle is half the measure of the corresponding central angle (i.e. that central angle which intersects the circle at the same points as the inscribed angle). A really neat interactive site lets you change the points on the circle and see the degree measure of the angles change:

www.ies.co.jp/math/ java/geo/enshup/enshup.html

Tangent is ⊥ radius (at point of tangency).
⊥Bisector of chord intercepts center.