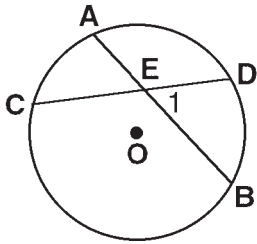


Name: _____
 CC Geometry Homework

Intersecting Chords

Questions 1 and 2 refer to the following:

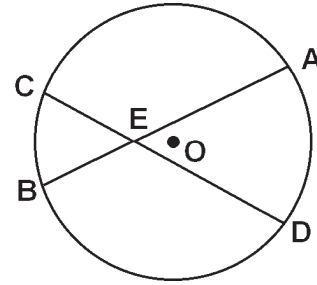
In circle O below, chords \overline{AB} and \overline{CD} intersect at E.



1) If $m\widehat{AC} = 30^\circ$ and $m\widehat{DB} = 50^\circ$, what is $m\angle 1$?

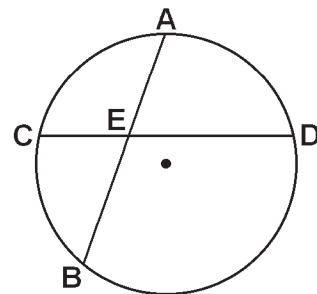
2) If $m\angle 1 = 50^\circ$ and $m\widehat{AC} = 40^\circ$, what is $m\widehat{DB}$?

3) In the accompanying diagram, chords \overline{AB} and \overline{CD} intersect at E.



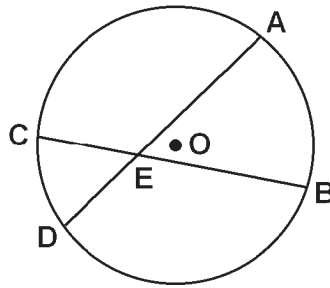
If $m\widehat{AD} = 70^\circ$ and $m\widehat{BC} = 40^\circ$, find $m\angle AED$.

4) In the accompanying diagram, chords \overline{AB} and \overline{CD} intersect in the circle at E.



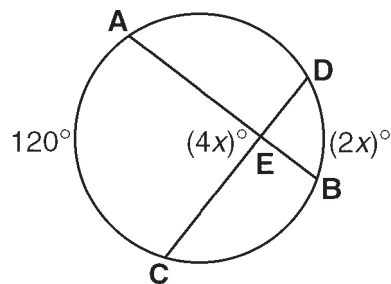
If $m\widehat{BC} = 60^\circ$ and $m\widehat{AD} = 80^\circ$, find $m\angle AEC$.

- 5) In the accompanying diagram of circle O, $m\widehat{AB} = 64^\circ$ and $m\angle AEB = 52^\circ$.



What is the measure of \widehat{CD} ?

- 6) In the diagram below, chords \overline{AB} and \overline{CD} intersect at E.



If $m\angle AEC = (4x)^\circ$, $m\widehat{AC} = 120^\circ$, and $m\widehat{DB} = (2x)^\circ$, what is the value of x ?