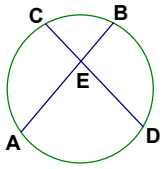
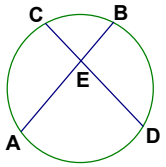
Name _____ Date _____
Mr. Schlansky Geometry

Intersecting Chords (Segments)

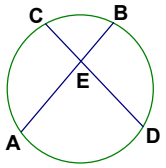
1. If $\overline{AE} = 8$, $\overline{EB} = 3$, $\overline{CE} = 6$, find $\overline{ED}$



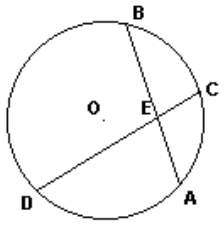
2. If $\overline{AB} = 11$, $\overline{EB} = 5$, $\overline{CE} = 10$, find $\overline{ED}$



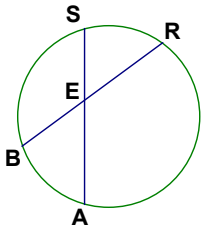
3. If $\overline{ED} = 10$, $\overline{EB} = 2$, $\overline{CE} = 4$, find $\overline{AB}$



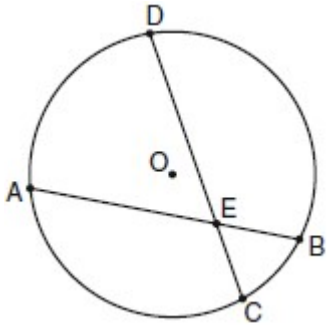
4. In the diagram of circle O, chords $\overline{BA}$ and $\overline{CD}$ intersect at E. $AE = 2$, $EB = x + 3$, $CE = x + 1$, and $ED = x$.



5. If $\overline{BR} = 10$, $\overline{BE} = 4$, $\overline{AE} = 8$, find $\overline{ES}$



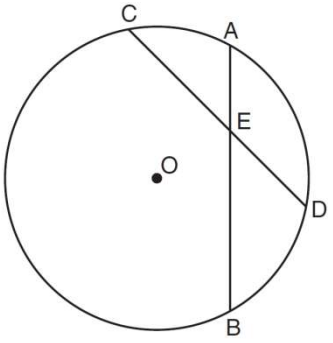
6. In the diagram of circle O below, chord $\overline{AB}$ intersects chord $\overline{CD}$ at E, $DE = 2x + 8$, $EC = 3$, $AE = 4x - 3$, and $EB = 4$.



What is the value of x?

1) 1
2) 3.6
3) 5
4) 10.25

7. In the diagram below of circle O, chords $\overline{AB}$ and $\overline{CD}$ intersect at E.



If $CE = 10$, $ED = 6$, and $AE = 4$, what is the length of $\overline{EB}$?

1) 15
2) 12
3) 6.7
4) 2.4

8. In the diagram below of circle O, chord $\overline{AB}$ bisects chord $\overline{CD}$ at E. If $AE = 8$ and $BE = 9$, find the length of $\overline{CE}$ in simplest radical form.