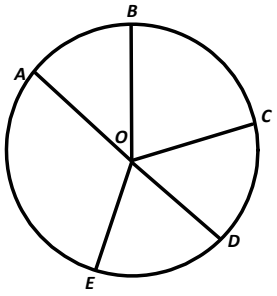
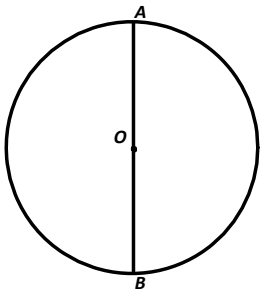
Arcs and Chords

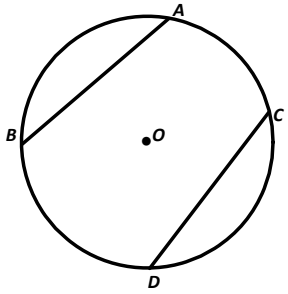


The sum of the measures of the central angles of a circle is 360°.

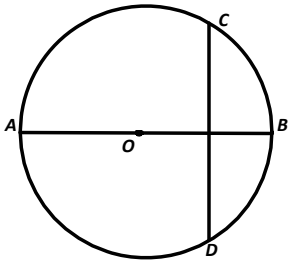
The sum of the measures of the arcs of a circle is 360°.



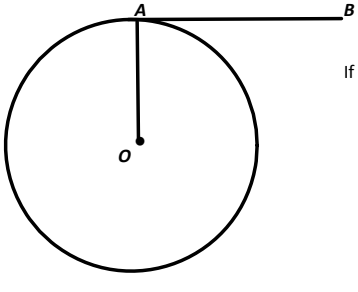
There are 180° in a semicircle.



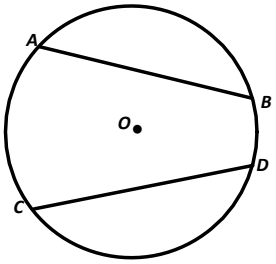
Minor arcs are congruent if their corresponding chords are congruent.



If a diameter or radius is perpendicular to a chord, then it bisects the chord and its arc.



If a line is tangent to a circle then it is perpendicular to its radius.

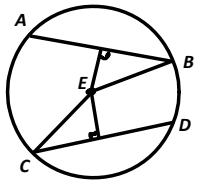


Two chords are congruent if and only if they are equidistant from the center.

1. Find the value of each.

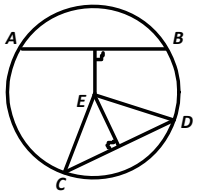
a) $m\measuredangle ECD = 25^\circ$

$m\measuredangle EBA =$



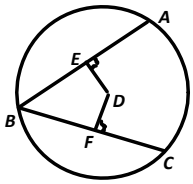
b) $m\measuredangle ECD = 35^\circ$

$m\overset{\frown}{AB} =$



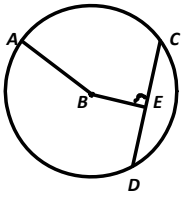
c) $\overline{AB} = 36$

$\overline{BF} =$

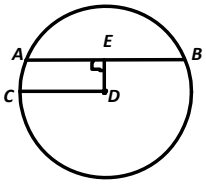


2. Find the value of x and round your answer to the nearest tenth.

a) $AB = 10$
$CD = 10$
$BE = x$



b) $ED = 5$
$CD = 13$
$AB = x$



c) $AB = 2$
$CD = 5$
$BD = x$