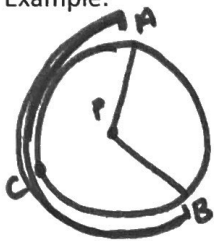


Central Angle: an angle whose vertex is at the center of the circle.



Major Arc: more than 180°

Example:



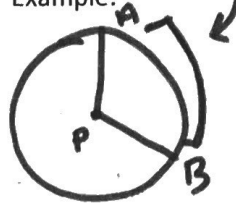
Symbolic Notation:

use 3 letters to name

EX: \widehat{ACB}

Minor Arc: LESS than 180°

Example:



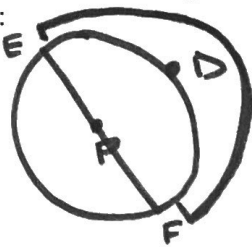
Symbolic Notation:

use 2 letters to name

EX: \widehat{AB}

Semicircle: an arc that equals 180°

Example:



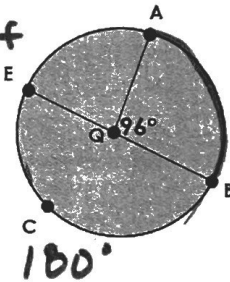
*Semi circles formed from diameters.

Symbolic Notation:

use 3 letters to name

Central Angle Formula: measure of arc = measure of central \angle .

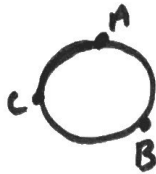
Example:



1) $m\widehat{AB} = 96^\circ$

2) $m\widehat{ACB} = 264^\circ$

3) $m\widehat{AE} = 84^\circ$

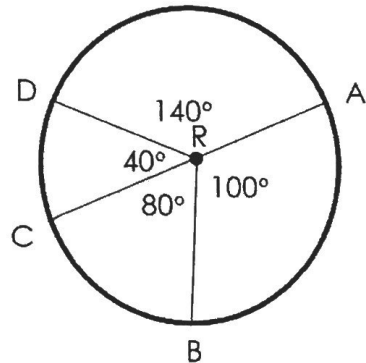


Arc Addition Postulate: $m\widehat{ABC} = m\widehat{AB} + m\widehat{BC}$

Examples:

1) $m\widehat{DAB} = 240^\circ$

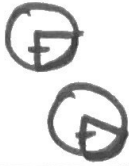
2) $m\widehat{BCA} = 260^\circ$



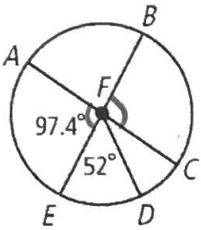
Congruent arcs

: have the same measure and MUST come from the same circle or of congruent circles

Examples:



Find $m\widehat{BD}$.



$\angle AFE \cong \angle BFC$
because they are
vertical \angle 's.

$$m\widehat{BD} = 97.4 + 30.6 =$$

$$\boxed{128^\circ}$$

$$m\widehat{BC} = 97.4^\circ$$

$$m\widehat{DC} = 180 - 97.4 - 52 = 30.6^\circ$$

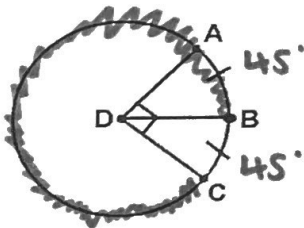
If the length from the center of the clock to the 12 is 4 inches, what is the distance from the 12 to the 3?



What is the arc measure between each number on the clock?

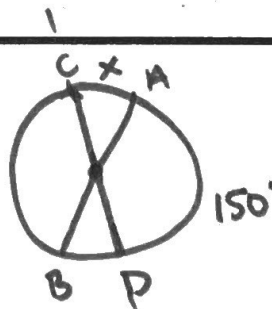
$$\frac{360}{12} = 30^\circ$$

Find $m\widehat{CAB}$.



$$360^\circ - 45^\circ = \boxed{315^\circ}$$

Two diameters of Circle Q are \overline{AB} and \overline{CD} . If $m\widehat{AD} = 150^\circ$, what is $m\widehat{AC}$?



$$180 - 150 =$$

$$\boxed{30^\circ}$$