

Core Concept Inscribed Angles

An _____
is an angle whose _____ is on a _____ and whose _____ contain _____ of the circle.
The measure of an _____
_____ is _____ the measure of the _____
A polygon is _____ in a circle if all its _____ lie on the circle.

If the $m\widehat{RP} = 140^\circ$
then $m\angle Q =$ _____

1) Find the value of x . Point A is the center.

$x =$ _____

$x =$ _____

$x =$ _____

2) If $m\widehat{EA} = 94^\circ$ then $m\angle B =$ _____
and $m\angle N =$ _____

Theorem:
If two _____ angles intercept the same _____ then the angles are _____.

3) If \overline{RO} is a diameter
then $m\widehat{RO} =$ _____
so $m\angle C =$ _____ $^\circ$
and $\triangle COR$ is a _____ \triangle .

Theorem: A right \triangle is inscribed in a circle iff the hypotenuse is a _____ of the circle.

4) If a quadrilateral is inscribed in a circle then its _____ angles are _____
_____.

$m\angle F + m\angle D =$ _____ $^\circ$
 $m\angle$ _____ $+ m\angle$ _____ $=$ _____ $^\circ$

5) Find the value of each variable and the indicate arc measure.

$x =$ _____
 $y =$ _____
 $m\widehat{LM} =$ _____ $^\circ$
 $m\widehat{KM} =$ _____ $^\circ$

$x =$ _____
 $y =$ _____
 $m\widehat{BCD} =$ _____ $^\circ$
 $m\widehat{BD} =$ _____ $^\circ$