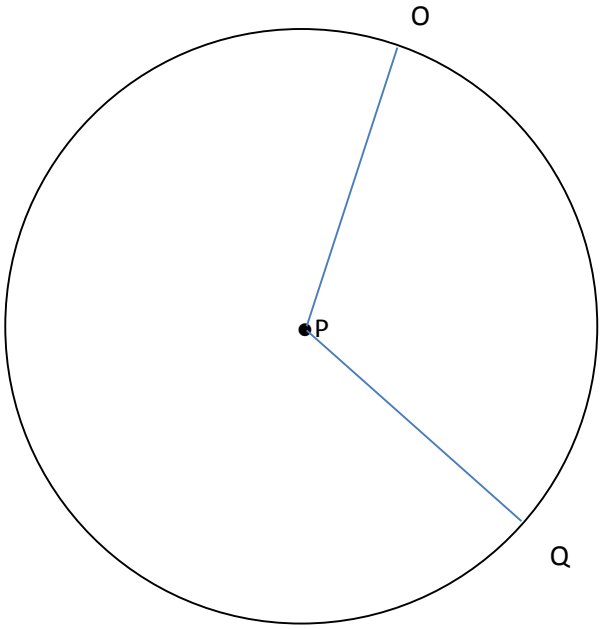
Unit Circles
Geometry 2
Day 4 Inscribed Angles

Name: _____
Period: 1 2 3 4 5 6 7 8

Central Angle:



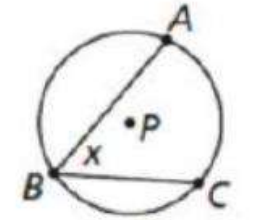
Given that P is the center:

$m\angle OPQ = m\overset{\frown}{OQ}$

Example: If $m\angle OPQ$ = 120°, what is the measure of arc OQ?

What is true about $\overline{OP}$ and $\overline{QP}$?

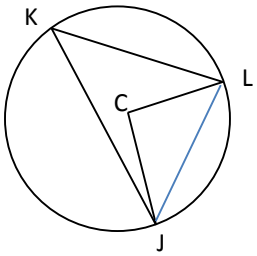
Inscribed Angle:



$m\angle x = \frac{1}{2}m\overset{\frown}{AC}$

An **inscribed angle** has its vertex on the circle and its sides contain chords of the circle

Practice:



Given: C is the center of the circle and measure or arc LJ = 70°

Is it possible to find the following measurements, if so calculate:

a. m$\angle LCJ$ =

b. m$\angle LJC$ =

c. m$\angle CLJ$ =

d. m$\angle LKJ$ =

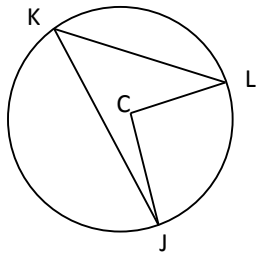
e. m$\angle KLJ$ =

f. m$\angle KJL$ =

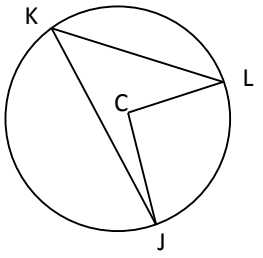
Applying the concept

Example 1:

a) If $m\angle JKL$ = 27°, what is $m\angle JCL$?

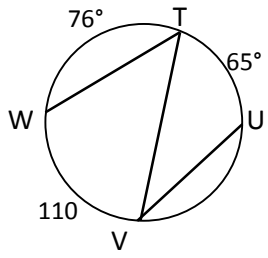


b) If $m\angle JCL$ = 90°, what is $m\angle JKL$?

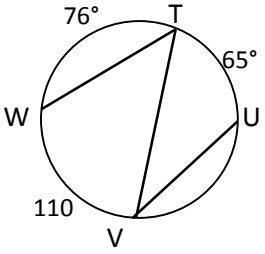


Example 2:

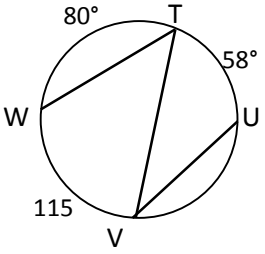
a) What is the $m\angle WTV$?



b) What is the $m\angle TVU$?

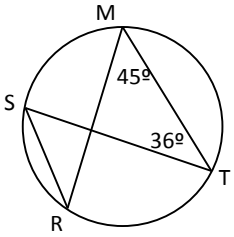


c) What is the $m\angle WTV$?

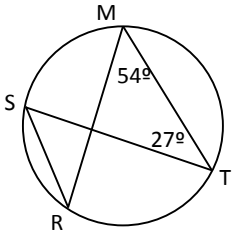


Example 3:

a) What is the measure of $\angle MRS$?

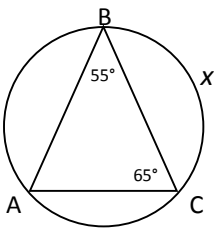


b) What is the measure of $\angle RST$?

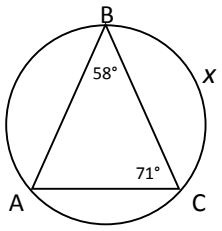


Example 4: Find the value of x

a)



b)



c)