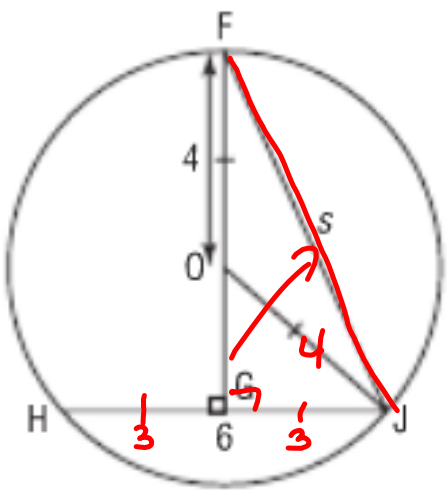
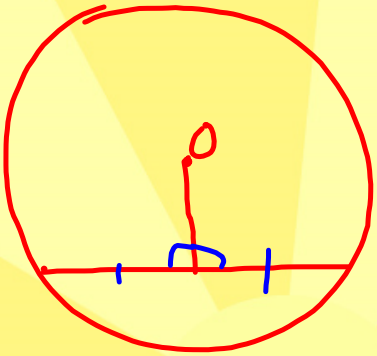
b)

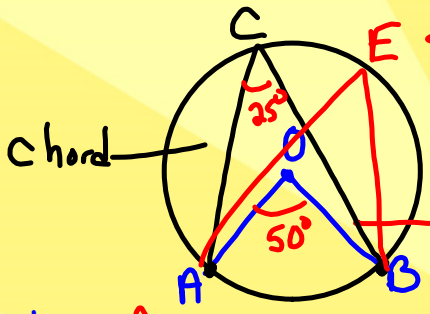




Warm-Up

Using diagrams explain the three properties of angles in a circle:

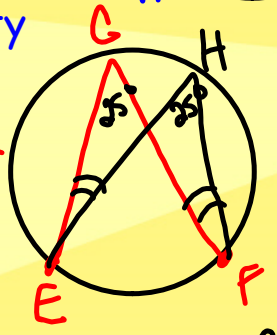
1. Central angle and inscribed angle property



$\angle AOB = 2\angle ACB$

2. Inscribed angle property

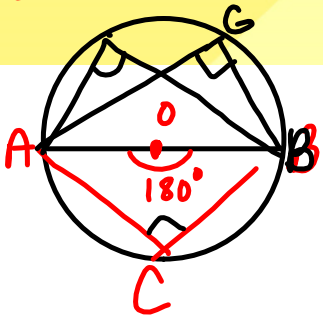
$\angle GEH = \angle GFH$



$\angle EGF = 25^\circ$

$\angle EHF = 25^\circ$

3. Angle in a semicircle

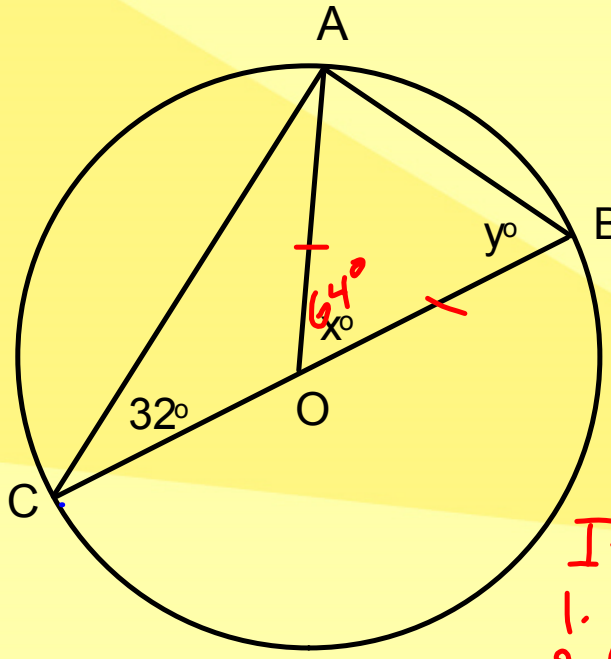


$\angle AOB = 180^\circ$

$\angle ACB = 90^\circ$

$\angle AGB =$

Point O is the center of the circle.
Determine the value of x° and y°.



KNOW

$\angle ACB = 32°$

$64 + 58 + 58 = 180°$

same #

Need

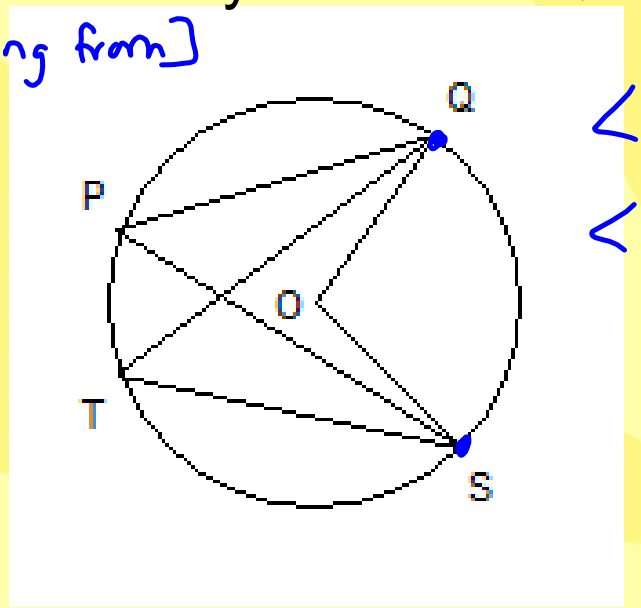
$\angle AOB = 64°$

$\angle ABC$

If not from the same arc:
1. Check for a diameter
2. Check Isoceles triangle [look for two radii making up triangle]

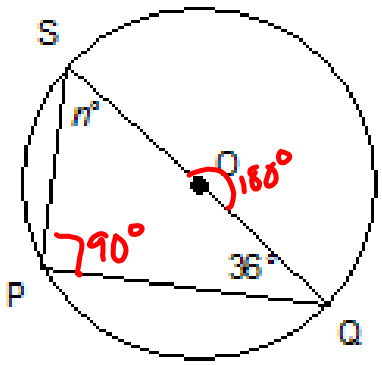
Identify all the inscribed angles subtended by minor arc QS

[coming from]



∠QPS

∠QTS



KNOW

$\angle PQS = 36^\circ$

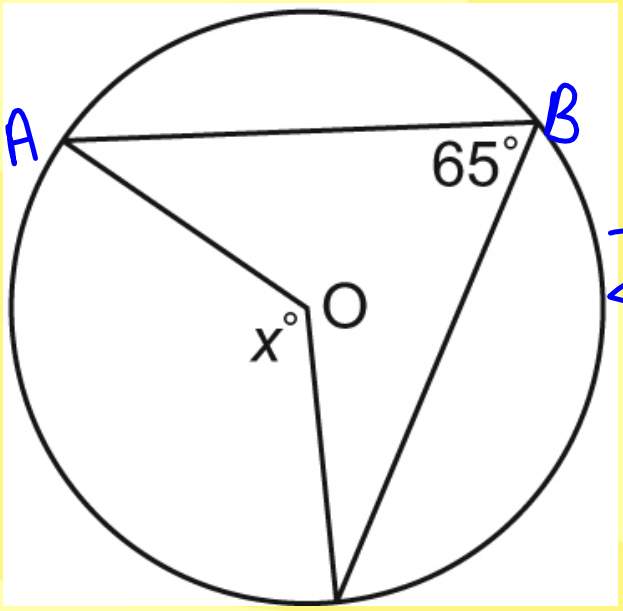
$\angle SOQ = 180^\circ$

NEED

$\angle QSP = 54^\circ$

$\angle SPQ$

$90 + 36 + 54 = 180^\circ$



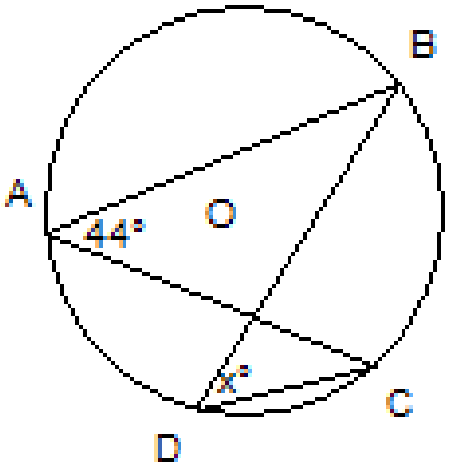
Know

$\angle ABC = 65°$

Need

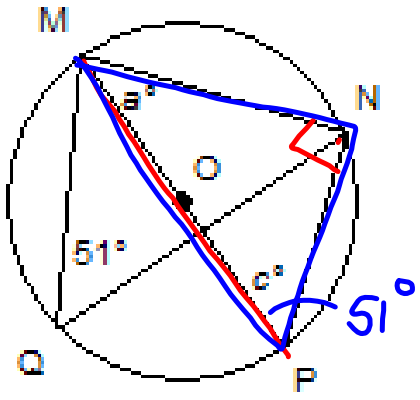
$\angle AOC$

$130°$



Know Need

$\angle BAC = 44$ $\angle BOC = 44^\circ$



Know: Need:

$\angle MQN = 51^\circ$ $\angle PMN = 39^\circ$

$\angle NPM = 51^\circ$

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#3, #4, #5, #6

Know
Need

central angle	inscribed
a)	
b)	
c	