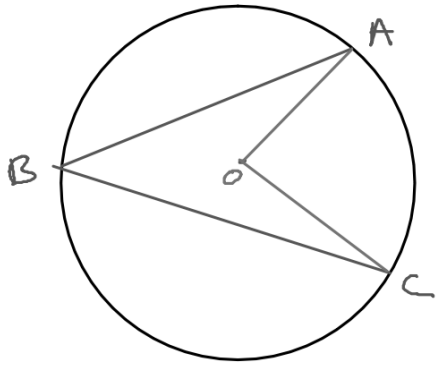
Inscribed Angle - Made by 2 Chords Vertex is on the Circle

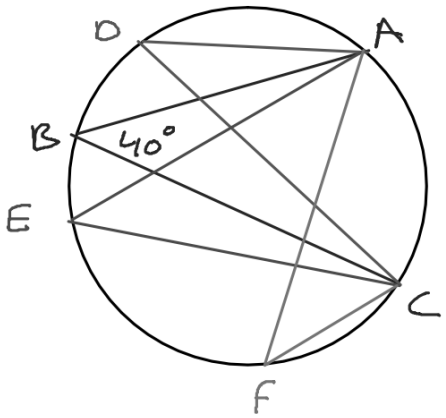


The measure of an inscribed angle is half the measure of its intercepted arc.

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

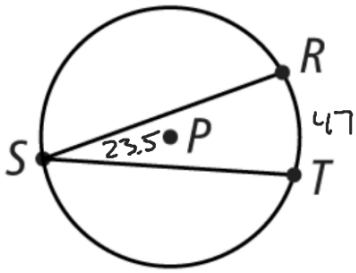
$$2\, m\overset{\frown}{AC} = m\angle ABC$$

If inscribed $\angle$'s arc $\cong$ they have the same intercepted Arc.

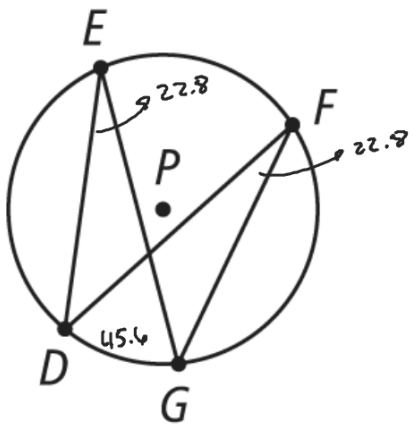


1. Given $\odot P$ with inscribed angle $\angle S$, if $m\overset{\frown}{RT} = 47$, what is $m\angle S$?

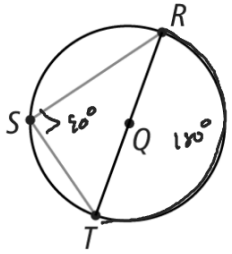
Enter your answer.



A. If $m\overset{\frown}{DG} = 45.6$, what are $m\angle E$ and $m\angle F$?



B. If $\overset{\frown}{RT}$ is a semicircle, what is $m\angle RST$?



SOLUTION

C. If $m\overset{\frown}{ABC} = 184$ and $m\overset{\frown}{BCD} = 242$, what are the measures of the angles of quadrilateral $ABCD$?

SOLUTION

$\angle C = 59 \quad 69$

$\angle A = 121 \quad 111$