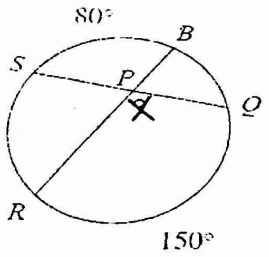
CCGPS Geometry | 3 – Circles and Volumes | 3.3 – Homework

Name: Answer Key Date:

All Angles Homework

Find the measure of the arc or angle indicated:

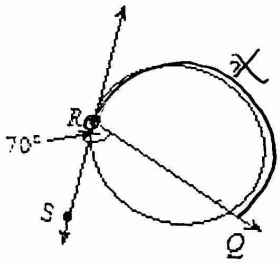
1) Int.



$x = \frac{80+150}{2}$

$x =$

2) On



$\frac{1}{2}\overset{\frown}{RQ} = m\angle SRQ$

$\overset{\frown}{RQ} = 140$

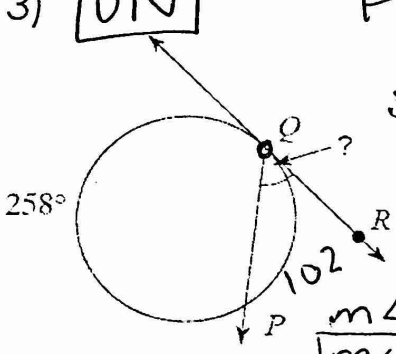
then $360-140=220°$

3) On

Find $\overset{\frown}{PQ}$ first

$360-258$

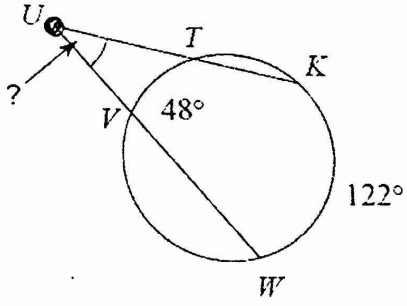
so $\overset{\frown}{PQ} = 102$



$m\angle Q = \frac{1}{2}(PQ)$

$m\angle Q = 61°$

4) Outside



$\angle U = \frac{\overset{\frown}{KW} - \overset{\frown}{TV}}{2}$

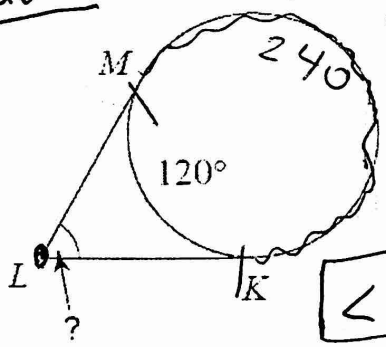
$\angle U = \frac{122-48}{2}$

$\angle U = 37°$

5) tside

Find $\overset{\frown}{MK}$ first

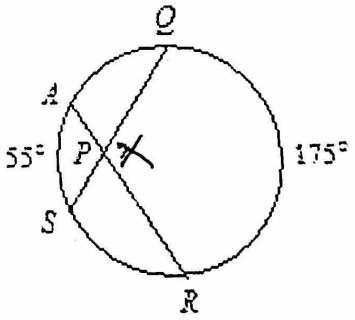
$360-120$



$\angle L = \frac{240-120}{2}$

$\angle L = 60°$

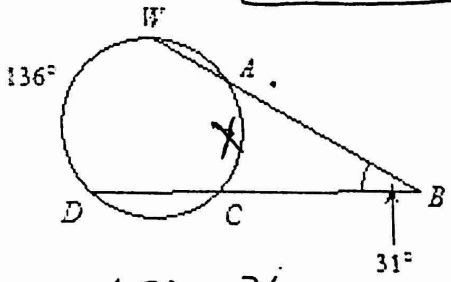
6) Interior



$x = \frac{55+175}{2}$

$x = 115°$

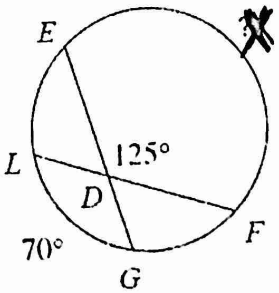
7) Outside



$31 = \frac{136-x}{2}$

$x = 74°$

8) Interior



$\text{angle} = \frac{\text{arc}+\text{arc}}{2}$

$125 = \frac{70+x}{2}$

$250 = 70 + x$

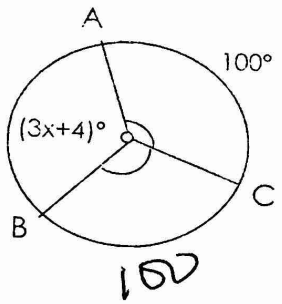
$x = 180$

Challenge Problems:

Find x.

$100+100+3x+4=360$

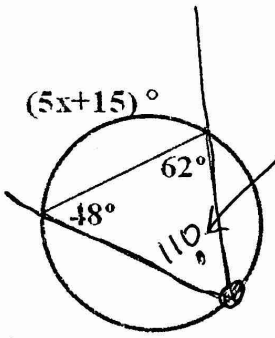
9)



100

$x=52$

10)



find using Δ sum

180

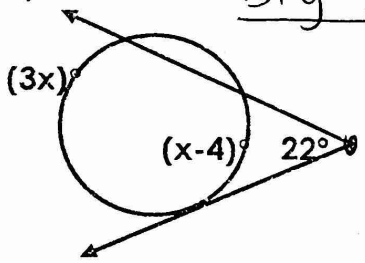
$2 \cdot 110 = \frac{1}{2}(5x+15) \cdot 2$

$220 = 5x+15$

$41 = x$

11)

Big - Little / 2



$$22 = \frac{3x-(x-4)}{2}$$

Don't forget how to subtract polynomials from Algebra 1... the subtraction sign gets distributed

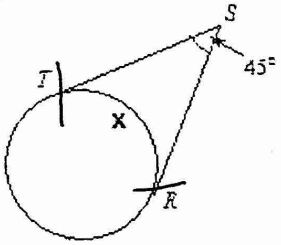
$$22 = \frac{2x+4}{2}$$

$44 = 2x+4$

$x = 20$

12)

This is A FUN



DVE....

I don't want to take away your fun so I'm not going to show you the work but I will tell you x should be

135