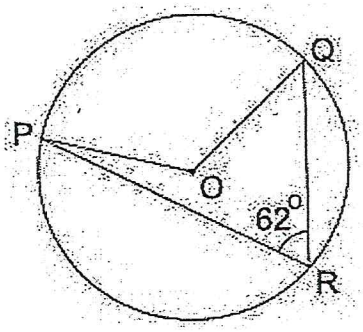
GEOMETRY – Circles Review

Name Key

Date _____ Hour _____

1.) Name the 2 chords in circle O. $\overline{PR}$ + $\overline{QR}$



2.) Name the Inscribed Angle that is marked in the diagram.

$\angle PRQ$

3.) Find the measure of arc PQ.

$2(62) = 124°$

4.) Name the Central Angle.

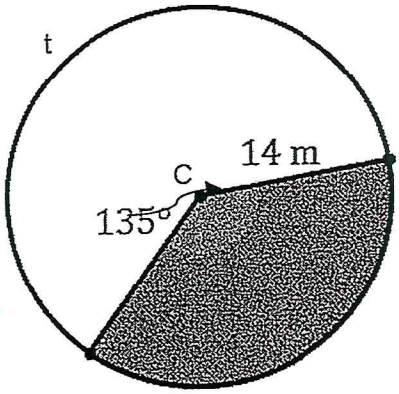
$\angle POQ$

5.) Find the measure of angle POQ.

$m\angle POQ = 124°$ by CAECA

Find the arc length of the shaded section.

$\frac{135}{360} \cdot \frac{2\pi(14)}{1} = \frac{3}{8} \cdot \frac{28\pi}{1} = \frac{84\pi}{8} = \frac{21\pi}{2}$ m

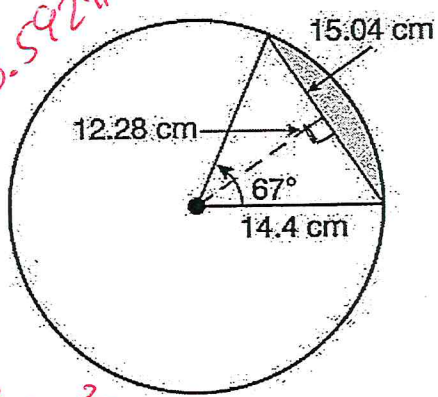


7.) Find the area of the shaded sector.

$\frac{135}{360} \cdot \frac{\pi(14)^2}{1} = \frac{3}{8} \cdot \frac{196\pi}{1} = \frac{588\pi}{8} = \frac{147\pi}{2}$ m^2

8.) Find the area of the shaded portion

$A_{SECTOR} = \frac{67}{360} \cdot \frac{\pi(14.4)^2}{1} = \frac{67}{360} \cdot \frac{207.36\pi}{1} = 38.592\pi$



$A_{TRIANGLE} = \frac{1}{2}(15.04)(12.28) = \frac{1}{2}(184.6912)$

$= 92.3456$

$A_{SHADED} = 38.592\pi - 92.3456 \approx 28.9$ cm^2