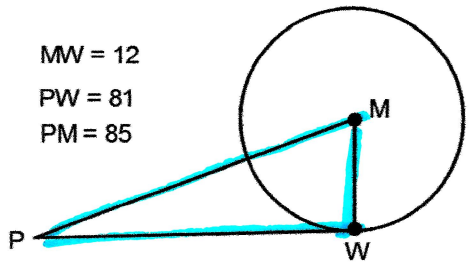
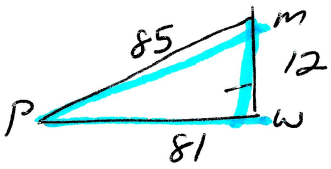
5. Is $\overline{WP}$ tangent to $\odot M$? Explain



is $\triangle WPM$ a right $\triangle$?



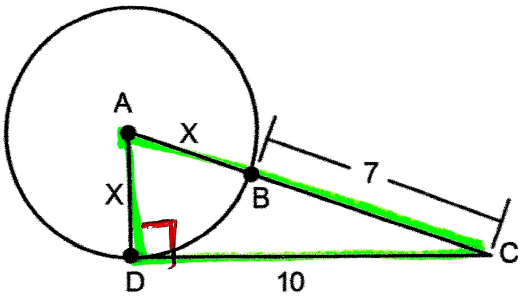
$85^2 \stackrel{?}{=} 12^2 + 81^2$

$7225 \stackrel{?}{=} 144 + 6561$

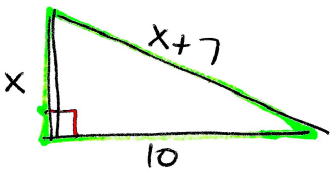
$7225 \neq 6705$

Therefore, $\triangle PMW$ is not a rt $\triangle$ and $\angle PWM$ is not a right $\angle$. THIS MEANS $\overline{PW}$ is NOT Tangent to the circle

6. Find the value of x to the nearest hundredth.



$X = 3.64$



$(x+7)^2 = x^2 + 10^2$

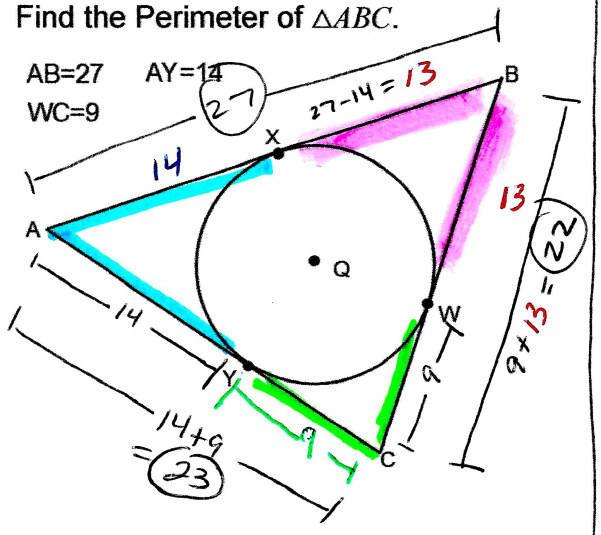
$x^2 + 14x + 49 = x^2 + 100$

$-49 \quad -49$

$14x = 51$

$x = 51/14$

7. $\triangle ABC$ is circumscribed about $\odot Q$.
Find the Perimeter of $\triangle ABC$.

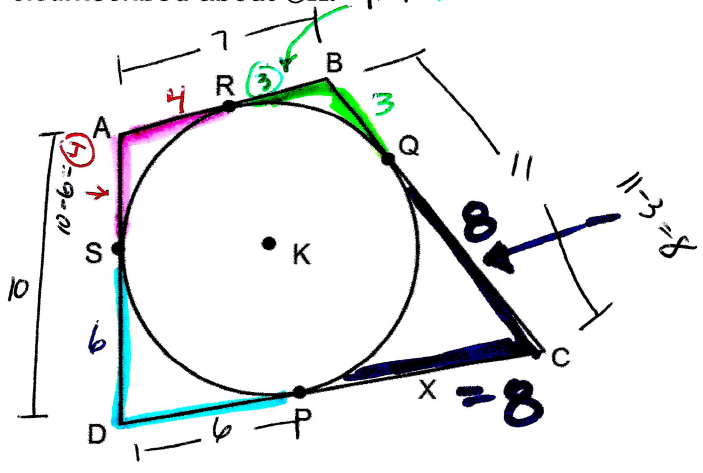


Perimeter = $27 + 22 + 23$

$P = 72$

8. Find the value of x if $ABCD$ is cicumscribed about $\odot K$.

DP=6
AD=10
AB=7
BC=11



START HERE

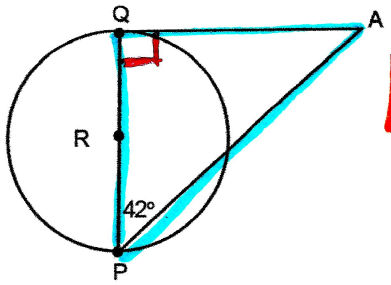
$X = 8$

Geo Practice #21 Sec 12-1 Mon & Tue, April 27/28, 2020

SOLUTIONS

Assume that lines that appear to be tangent to a circle are tangent.

1. $\overline{PQ}$ is a diameter of $\odot R$. Find the measure of $\angle QAP$.

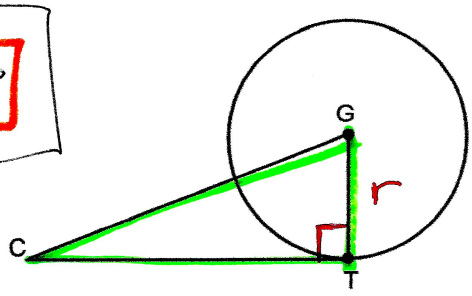


$m\angle QAP = 48°$

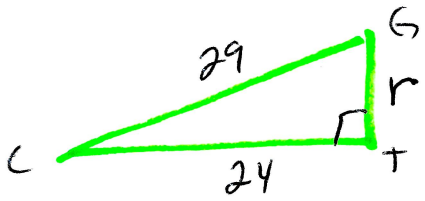
$m\angle QAP = 180° - 90° - 42°$

$m\angle QAP = 48°$

2. If $TC = 24$ and $GC = 29$, find the radius of $\odot G$ to the nearest hundredth.



radius =

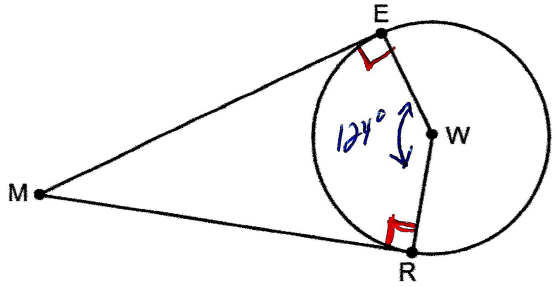


$29^2 = r^2 + 24^2$

$\sqrt{r^2} = \sqrt{29^2 - 24^2}$

$r = 16.28$

3. If $m\angle EWR = 124°$ find the $m\angle EMR$.



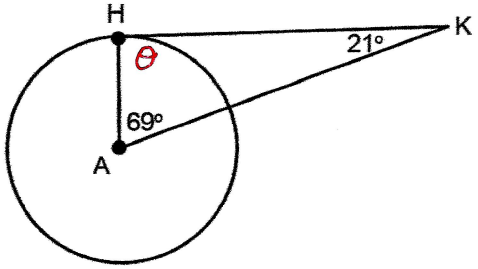
radius

$m\angle EMR = 56°$

$\angle EMR = 360° - 90° - 90° - 124°$

$\angle EMR = 56°$

4. Is $\overline{HK}$ tangent to $\odot A$? Explain.



$\theta = 180° - 69° - 21°$

$\theta = 90°$

Therefore $\overline{HK}$ is $\perp$ to $\overline{AH}$ and this means

$\overline{HK}$ must be tangent to the circle