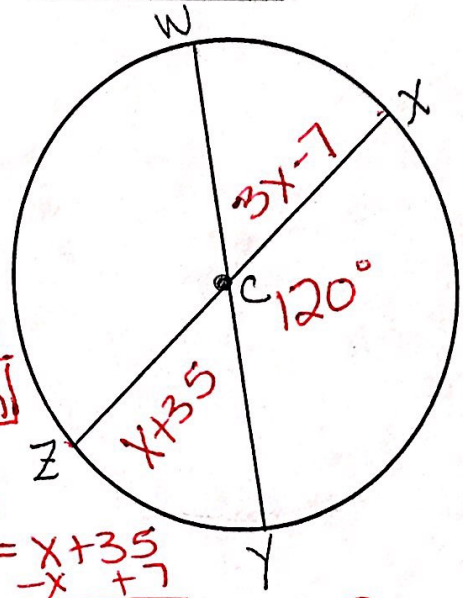
10.1-10.3 Review

Name_____



1. Review the vocabulary chart. ✓

2. What is the name of the circle? ⊙C

3. If $\overline{WY}$ is 18 in find $\overline{ZX}$ and $\overline{WC}$. ZX=18, WC=9

4. If m<XCY=120 find: $\frac{A}{360}$ C=l

   a. length of $\widehat{XY}$ $\frac{120}{360}(18\pi) = \boxed{18.85in}$

   b. length of $\widehat{WXY}$ $\frac{180}{360}(18\pi) = \boxed{28.27in}$

   c. length of $\widehat{ZYW}$ Also a semicircle $\boxed{28.27in}$

5. If <WCX=3x-7 and <ZCY=x+35, solve for x. $\boxed{x=21}$

$3x-7 = x+35$
$-x+7 \quad -x \quad +7$
$\frac{2x}{2} = \frac{42}{2}$ $x=21$

6. If <WCY = 25x+4, solve for x. $25x+4=180$, $\boxed{x=7.04}$

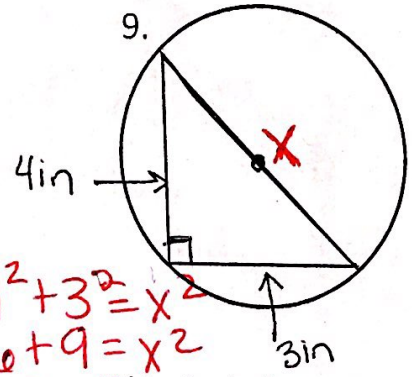
$25x+4=180$
$-4 \quad -4$
$25x=176$
$x=7.04$

7. Find each measure. M<WCY= 180° m<ZCY= 60° $m\widehat{WX}$= 60°

$m\widehat{WZY}$= 180° mWXZ= 240 (assume m<XCY is 120°)

8. If CZ=98.2ft what is the circumference of the circle? d=196.4, C=πd, $\boxed{C=617.01 ft}$

9.



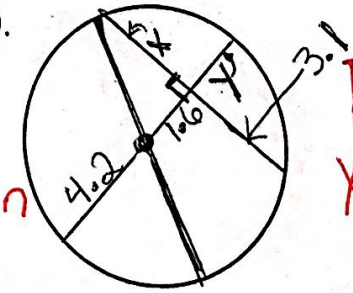
d= 5in

r= 2.5in

C= 5π ≈ 15.7in

$4^2+3^2=x^2$
$16+9=x^2$
$25=x^2$
$5=x$

10.



$\boxed{x=3.1}$

$y=4.2-1.6=\boxed{2.6}$

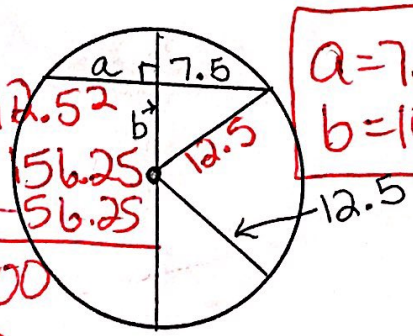
11. A circle has a circumference of 107.54 meters. Find the radius and diameter.

$C=\pi d$

$\frac{107.54}{\pi} = \frac{\pi d}{\pi}$

$\boxed{d=34.23m}$

12.

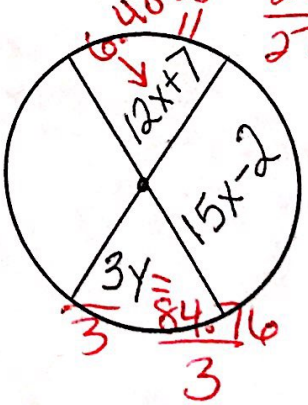


use Pythag

$7.5^2+b^2=12.5^2$
$56.25+b^2=156.25$
$-56.25 \quad -56.25$
$b^2=100$
$b=10$

$\boxed{a=7.5 \quad b=10}$

13.



$\frac{48}{3}$ $\frac{84.76}{3}$

$12x+7+15x-2=180$
$27x+5=180$
$-5 \quad -5$
$27x=175$

x= 6.48

y= 28.25