

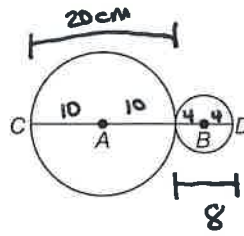
IN CLASS REVIEW 9.1-9.4
(wk p58)

1. What is the name of the longest chord in a circle?

- A diameter B radius C secant D tangent

2. The radius of $\odot B$ is 4 centimeters and the circumference of $\odot A$ is 20π centimeters. Find CD .

- F 10 cm H 24 cm
G 14 cm J 28 cm

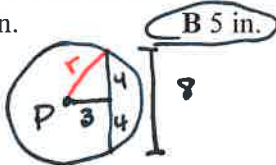


Circle A Circle B
 $C = 20\pi$ $r = 4\text{ cm}$
 $C = 2\pi r$ $d = 2 \cdot 4$
 $20\pi = \frac{2\pi r}{2\pi}$ $d = 8\text{ cm}$
 $10 = r$
 $d = 2 \cdot 10$
 $d = 20\text{ cm}$

$CD = 28\text{ cm}$

3. A chord of $\odot P$ measures 8 inches and the distance from the center to the chord is 3 inches. Find the radius of $\odot P$.

- A 3 in. B 5 in. C $\sqrt{73}$ in. D 10 in.

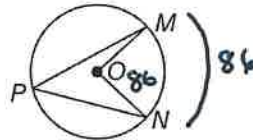


$3^2 + 4^2 = r^2$ $25 = r^2$ $r = 5\text{ in}$
 $9 + 16 = r^2$ $\sqrt{25} = r$

inscribed \angle is $\frac{1}{2}$ intercepted arc

4. If $m\angle MON = 86$, find $m\angle MPN$.

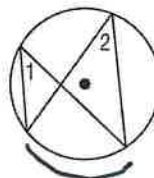
- F 86 H 43
G 45 J 30



$m\angle P = \frac{86}{2} = 43^\circ$
 $m\angle MPN = 43^\circ$

5. Find x if $m\angle 1 = 2x + 10$ and $m\angle 2 = 3x - 6$.

- A 4 C 24
B 16 D 42

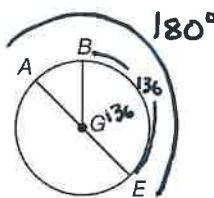


$\angle 1$ & $\angle 2$ have same intercepted arc, so they are \cong

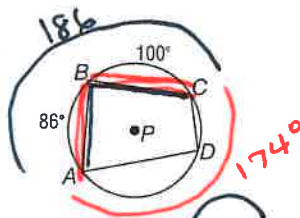
$m\angle 1 = m\angle 2$
 $2x + 10 = 3x - 6$
 $-2x \quad -2x$
 $10 = x - 6$
 $+6 \quad +6$
 $16 = x$

6. \overline{AE} is a diameter of $\odot G$ and $m\angle BGE = 136$. Find $m\widehat{AB}$.

$m\widehat{ABE} = 180$
 $m\widehat{AB} = 180 - 136 = 44^\circ$
 $m\widehat{AB} = 44^\circ$



10. Quadrilateral $ABCD$ is inscribed in $\odot P$. Find $m\angle ABC$.



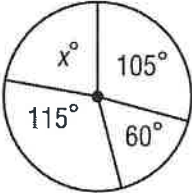
$m\widehat{ADC} = 360 - 186$
 $= 174$

$\angle ABC$ is inscribed \angle so $\frac{1}{2}$ intercepted arc

$m\angle ABC = \frac{174}{2}$

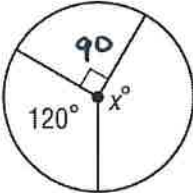
$m\angle ABC = 87^\circ$

Rev 9.2 (wk p11)
Find the value of x.

1. 
$$\begin{array}{r} 105 \\ 115 \\ + 60 \\ \hline 280 \end{array}$$

$$\begin{array}{r} 360 \\ - 280 \\ \hline 80 \end{array}$$

$$x = 80^\circ$$

2. 
$$\begin{array}{r} 90 \\ + 120 \\ \hline 210 \end{array}$$

$$\begin{array}{r} 360 \\ - 210 \\ \hline 150 \end{array}$$

$$x = 150^\circ$$

Rev 9.1 (wk p7)

6. Suppose the diameter of the circle is 16 centimeters. Find the radius.

$$r = \frac{d}{2} = \frac{16}{2} = 8$$

radius is 8cm

Rev 9.1 (wk p8)

14. **SUNDIALS** Herman purchased a sundial to use as the centerpiece for a garden. The diameter of the sundial is 9.5 inches.

$$d = 9.5 \text{ in}$$

a. Find the radius of the sundial.

$$r = \frac{9.5}{2} = 4.75$$

radius is 4.75in

b. Find the circumference of the sundial to the nearest hundredth.

$$C = \pi d$$

$$C = \pi (9.5)$$

$$C \approx 29.8451\dots$$

$C \approx 29.85 \text{ in}$