

WARM-UP

1.  Find the length of \overline{AB} .

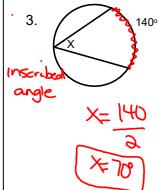
$$\text{length } \overline{AB} = \frac{100}{360} \cdot 2\pi r = \frac{100}{360} \cdot 2\pi \cdot 4 = 6.98$$
2.  Solve for r .

$$r^2 + 12^2 = (r+8)^2$$

$$r^2 + 144 = (r+8)(r+8)$$

$$r^2 + 144 = r^2 + 16r + 64$$

$$-64 = 16r$$

$$r = 4$$
3.  Inscribed angle x .

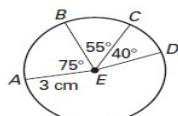
$$x = \frac{140}{2}$$

$$x = 70$$

Apr 29-2:59 PM

DAILY HOMEWORK QUIZ

DLT

Find the measure.

1. $m\widehat{BC}$ 55°
 2. $m\widehat{AC}$ 130°
 3. $m\angle BED$ 95°
4. Find the length of \overline{CD} . Round your answer to the nearest hundredth.
 2.09cm

$$\frac{m\widehat{CD}}{360} \cdot 2\pi r$$

Apr 30-8:10 AM

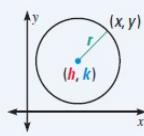
10.7 Equations of Circles**STANDARD EQUATION OF A CIRCLE**

In the coordinate plane, the standard equation of a circle with center at (h, k) and radius r is

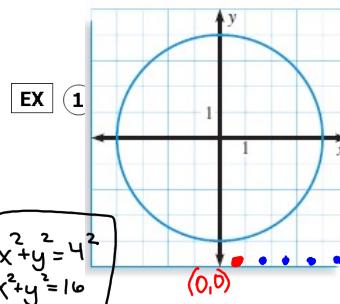
$$(x - h)^2 + (y - k)^2 = r^2.$$

x-coordinate of the center

y-coordinate of the center



May 10-11:34 AM

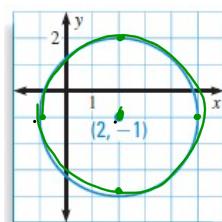
Write an equation of the circle.

$$(x-h)^2 + (y-k)^2 = r^2$$

Center (h, k)

May 10-11:32 AM

- EX 2** Write equation of circle with center $(2, -1)$ and radius 3.



$$(h, k) \quad r=3$$

$$(x-h)^2 + (y-k)^2 = r^2$$

$$(x-2)^2 + (y+1)^2 = 9$$

Apr 15-9:50 AM

Draw Circle. Label Center

- EX 3** $(x - 2)^2 + (y + 3)^2 = 16$

$$(x-h)^2 + (y-k)^2 = r^2$$

$$(h, k) \quad (2, -3)$$

$$r^2 = 16$$

$$r = 4$$

- Steps: Plot center
- Count radius
up, down, left, right
- 4 points connect

$$x^2 + (y - 1)^2 = 9$$

$$\text{Center } (h, k) \quad (0, 1)$$

$$r^2 = 9$$

$$r = 3$$

May 9-11:02 AM

Write the center and radius

1. $(x - 4)^2 + (y + 5)^2 = 16$ $\boxed{(4, -5)}$ $r^2 = 16$ $\boxed{r=4}$

2. $(x + 2)^2 + (y - 6)^2 = 49$ $\boxed{(-2, 6)}$ $r^2 = 49$ $\boxed{r=7}$

3. $x^2 + (y + 7)^2 = 9$ $\boxed{(0, -7)}$ $r^2 = 9$ $\boxed{r=3}$

Write the equation of the circle

$\text{h } \text{k}$ $(x-h)^2 + (y-k)^2 = r^2$

4. C(-3, 4) $r = 5$ $(x+3)^2 + (y-4)^2 = 25$

5. C(2, 5) $r = 8$ $(x-2)^2 + (y-5)^2 = 64$

6. C(-6, 0) $r = 10$ $(x+6)^2 + (y+0)^2 = 100$

Hw #11
 $(x+4)^2 + (y-4)^2 = 25$

Apr 30-8:14 AM

Hw

Pg 579, #3-14

Apr 29-3:02 PM