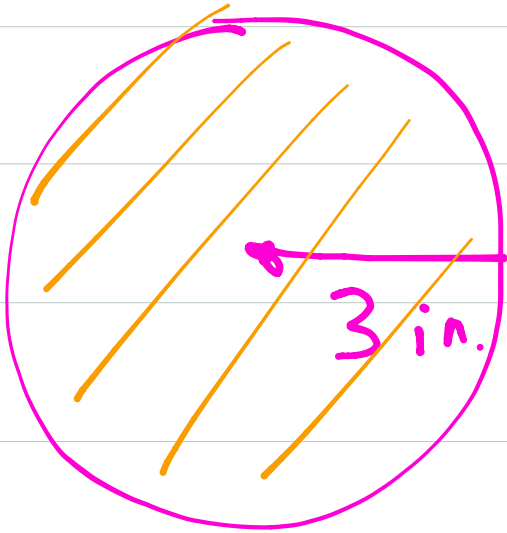


## 11.2 notes

Area of  
Circle



$$A = \pi r^2$$

$$= \pi (3)^2$$

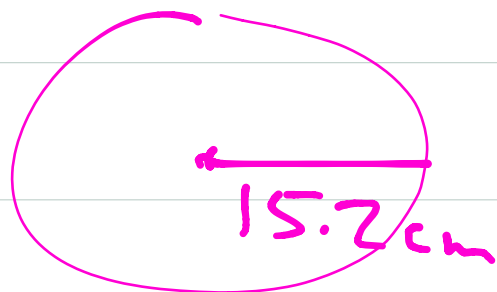
$$= 9\pi \text{ in.}^2$$

$$C = \pi d$$

$$= 6\pi \text{ in.}$$

ex.

Find Area.



$$A = \pi (15.2)^2$$

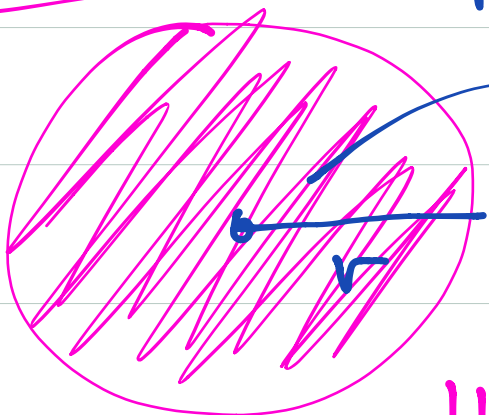
$$= 231.04\pi \text{ cm}^2$$

ex.

or

$$725.83 \text{ cm}^2$$

Find radius



$$A = 113.1 \text{ m}^2$$

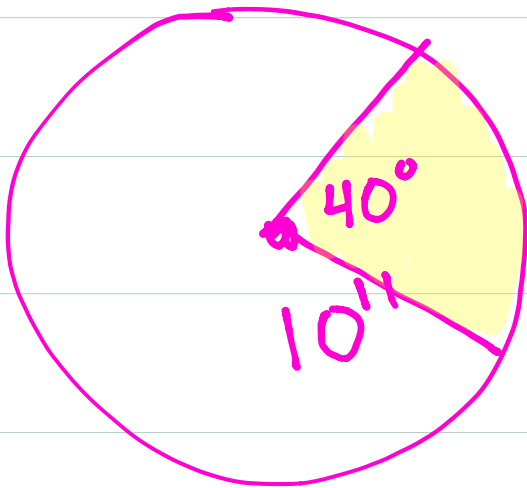
$$A = \pi r^2$$

$$\frac{113.1}{\pi} = \frac{\pi r^2}{\pi}$$

$$\sqrt{36.0008} = \sqrt{r^2}$$

$$6.0 \text{ in.} = r$$

Find the Area of a Sector



Sector

$$\frac{40^\circ}{360^\circ} = \frac{X}{100\pi}$$

Area  
 $\pi r^2$

$$\frac{1}{9} = \frac{X}{100\pi}$$

$$\frac{1}{9} X = \frac{100\pi}{9}$$

$$X = 34.91 \text{ in.}^2$$



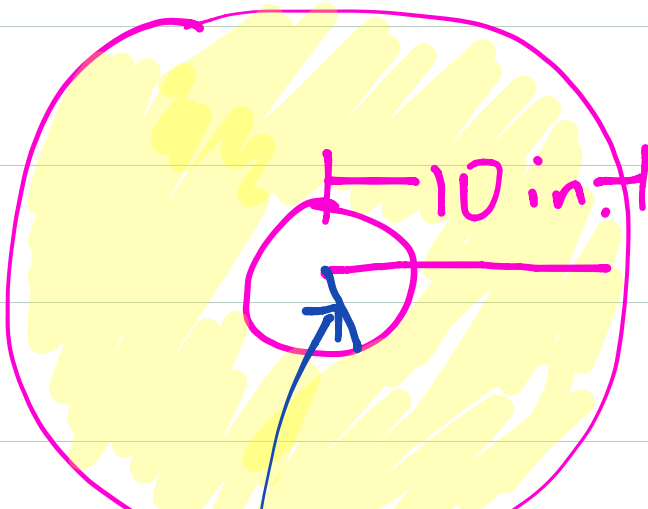
Find the Area of a Sector.

$$\frac{45^\circ}{360^\circ} = \frac{X}{144\pi}$$

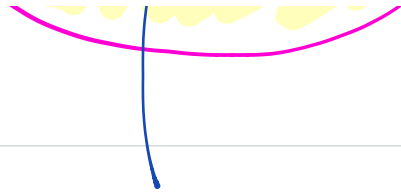
Area

$$\frac{1}{8} = \frac{X}{144\pi}$$

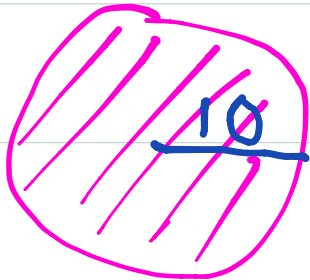
$$X = 56.54 \text{ in.}^2$$



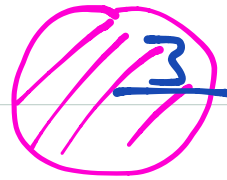
Find the Shaded region.



3 in.



—



$A(\text{Big})$

$A(\text{Small})$

$100\pi$

—

$9\pi$

$91\pi \text{ in.}^2$