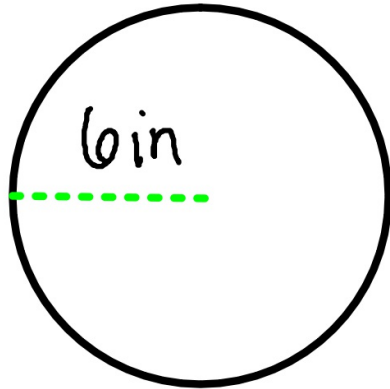


L40 AREA OF CIRCLES

$$\pi r^2$$



find area in terms of π

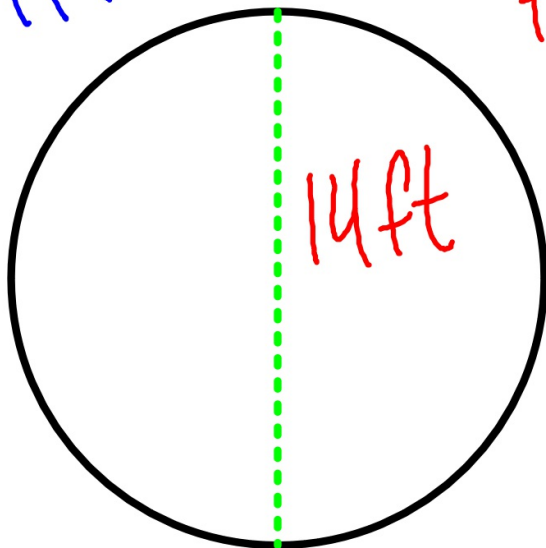
$$\pi(6\text{in})^2 \text{ leave } \pi \text{ as } \pi$$
$$= 36\pi \text{ in}^2$$

Use 3.14 for π

$$36(3.14)\text{in}^2$$

$$\begin{array}{r} 3.14 \\ \times 36 \\ \hline 1884 \\ 9420 \\ \hline 11304 \end{array}$$

$$\pi r^2$$

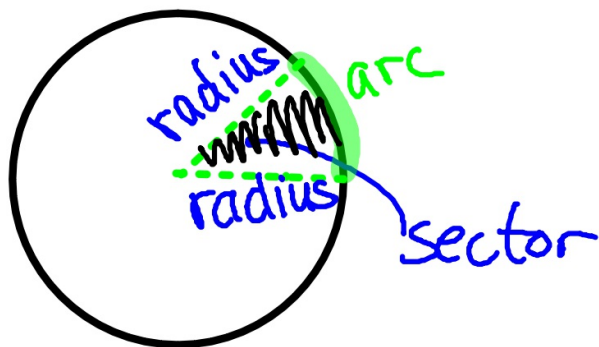


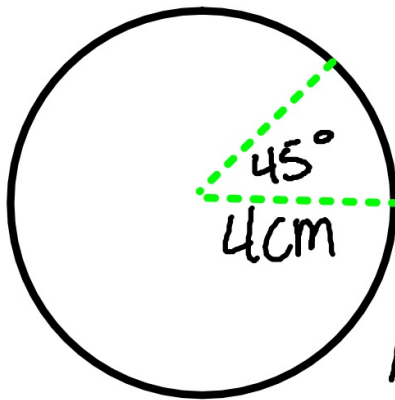
find area, use $\frac{22}{7}$ as π

$$\frac{22}{7} \cdot \frac{(7^2)}{1} = 154\text{ft}^2$$

$$\text{Circumference} = \pi d$$

$$\text{Area} = \pi r^2$$



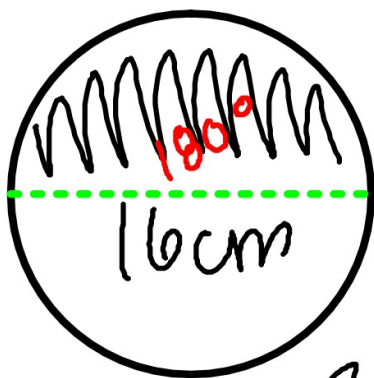


find area of sector

$$\frac{45^\circ}{360^\circ} = \frac{1}{8} \quad \text{leave } \pi \text{ as } \pi$$

$$\begin{aligned} \text{Area of entire circle} &= \pi r^2 \\ &= \pi (4\text{cm})^2 \\ &= 16\pi\text{cm}^2 \end{aligned}$$

$$\frac{1}{8} \times 16\pi\text{cm}^2 = 2\pi\text{cm}^2$$

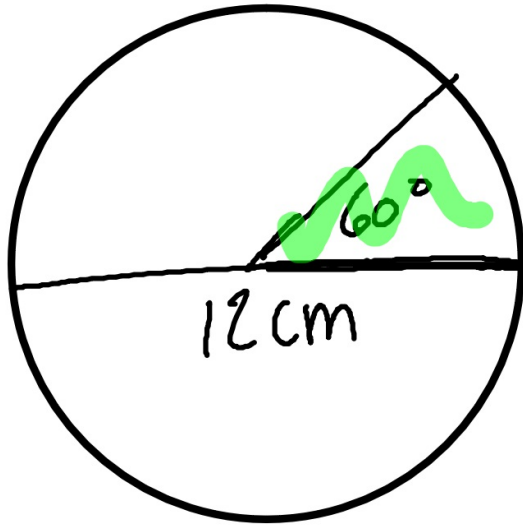


find area, leave π as π

$$\frac{180^\circ \div 2}{360^\circ \div 2} = \frac{9 \div 9}{18 \div 9} = \frac{1}{2}$$

$$\pi r^2 = (8\text{cm})^2 \pi \left(\frac{1}{2}\right) = 64\pi\text{cm}^2 \left(\frac{1}{2}\right)$$

$$32\pi\text{cm}^2$$



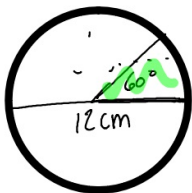
$$\frac{60}{360} = \frac{1}{6}$$

$$\pi r^2$$

$$\frac{6^2 \pi}{360} \left(\frac{1}{6}\right)$$

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

Always leave π as π until the end...



$$\frac{60}{360}$$

$$\pi r^2$$

$$\frac{6^2 \pi}{360}$$

$$\left(\frac{1}{6}\right)$$

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

3.14 as π

~~$$\frac{60}{360} (3.14)$$~~

$$\begin{array}{r} 3.14 \\ \times 6 \\ \hline 18.84 \end{array}$$