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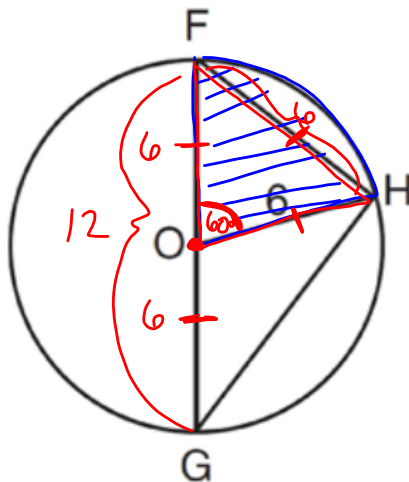
Triangle \overline{FGH} is inscribed in circle O , the length of radius \overline{OH} is 6, and $\overline{FH} \cong \overline{OG}$.

What is the area of the sector formed by angle $\angle FOH$?

$$A = \frac{n}{360} \cdot \pi r^2$$

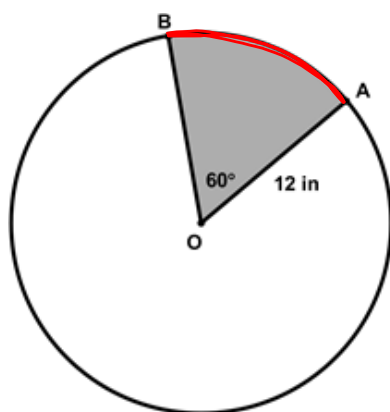
$$A = \frac{60}{360} \pi (6)^2$$

$$A = 6\pi$$



Feb 15-9:58 AM

In Circle O shown below, with a radius of 12 inches, a sector has been defined by two radii with a central angle of 60 degrees as shown. Determine the length of \widehat{AB} → "Arc AB"



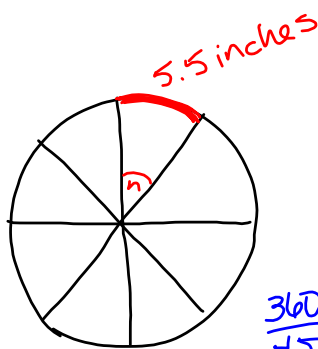
(in terms of π)

$$\widehat{AB} = \frac{60}{360} \cdot \pi (24)$$

$$\widehat{AB} = 4\pi \text{ inches}$$

Feb 25-8:17 AM

A circular pizza is divided into eight equal slices. The outer edge of the crust from one piece measures 5.5 inches. What is the diameter of the pizza to the *nearest inch*?



$$s = \frac{n}{360} \cdot \pi d$$

$$\frac{5.5}{\pi} = \frac{45}{360} \cdot \pi d$$

$$\frac{360}{45} \cdot 1.7507... = \frac{45}{360} d \cdot \frac{360}{45}$$

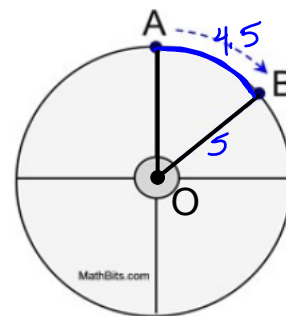
$$\frac{360}{8} = 45^\circ$$

$$14.00... = d$$

14 inches

Feb 25-8:27 AM

A child pushes a playground merry-go-round so handle A moves to position B . The radius of the merry-go-round is 5 feet and the distance traveled by the handle along the arc from A to B is 4.5 feet. Find to the *nearest degree*, the measure of $\angle AOB$



$$\widehat{AB} = \frac{n}{360} \cdot \pi d$$

$$\frac{4.5}{10\pi} = \frac{n}{360} \cdot \frac{10\pi}{10\pi}$$

$$n = 51.56...$$

52°

$$.1432... = \frac{n}{360}$$

Feb 25-8:21 AM