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## Main Ideas/ Questions

Sector Area Characteristics

## Notes

Sector Area - A piece of the $\qquad$ from the whole circle

## Funny way to remember:

 Sector Area = Pie

## Formula:

$$
\frac{\text { Sector Area }}{\text { Area }\left(\pi r^{2}\right)}=\frac{\text { Central Angle }(\theta)}{\text { Whole Circle in degrees }\left(360^{\circ}\right)}
$$

Examples


1. Find the area that uses Arc AB.
2. Find the area that uses Arc CA.
3. A circle has an area is $32.5 \mathrm{in}^{2}$. What is the diameter of the circle?

## Main Ideas/ Questions

Examples
4. A circle has a sector whose measure is $80^{\circ}$ and whose area is $88 \mathrm{~cm}^{2}$. What is the diameter of the circle?
5. Find the measure of the central angle of a circle if its minor arc area is $14 \pi f t^{2}$ and the radius is 12 feet.
6. A pendulum is 10 inches long. When the pendulum swings it travels along the arc of a circle and covers an area of $50.65 \mathrm{in}^{2}$. What is the angle that the pendulum is swinging?

