

Notes Circumference

π = ratio of circumference to diameter for every circle.

$$D = \pi = \frac{C}{D} \cdot D$$

$$C = \pi D \text{ circumference}$$

$$C = 2\pi r \quad (D = 2 \text{ radii})$$

If $C = 10\pi$, find d

$$C = \pi D$$

$$10 = D \quad r = 5 \text{ cm}$$

If $r = 8 \text{ cm}$, find C

$$2\pi r = 2\pi \cdot 8$$

$$16\pi \text{ cm} = C$$

If $C = 48 \text{ cm}$

find r

$$\frac{2\pi r}{2\pi} = \frac{48}{(2\pi)}$$

$$r = \frac{24}{\pi}$$

Arc Length = $\frac{\text{part of a circumference}}{\uparrow}$

$$\text{Arc Length} = \frac{\text{arc measure}}{360} \cdot 2\pi r \quad \text{or } \pi D \text{ or } C$$

$$\text{Arc} = 140^\circ$$

$$r = 36 \text{ ft.}$$

Arc Length = ?

$$\frac{140}{360} \cdot 2\pi \cdot 36$$

$$\rightarrow 28\pi \text{ cm}$$

HW #8 - finish worksheet
p 483: 1-4, p 478: 1-12
not on quiz