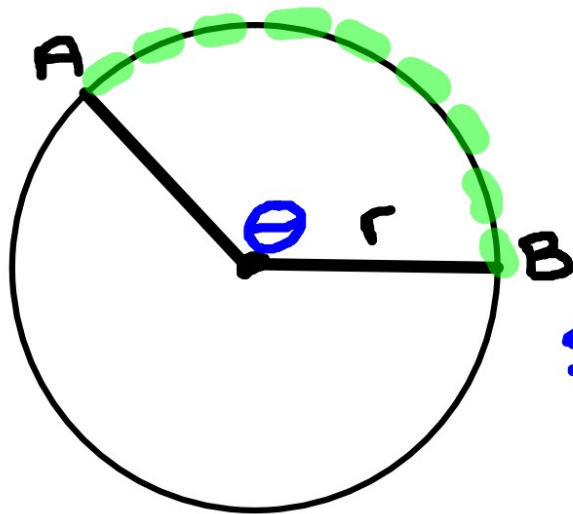


Circumference Formula

$$C = 2\pi r$$

$$C = D\pi$$

length of \widehat{AB}
(θ in radians)



$$S = \cancel{2\pi} r \left(\frac{\theta}{\cancel{2\pi}} \right)$$

$$S = r\theta$$

θ in radians

"s" (arc length)

$$S = r \theta \quad (\text{radians})$$

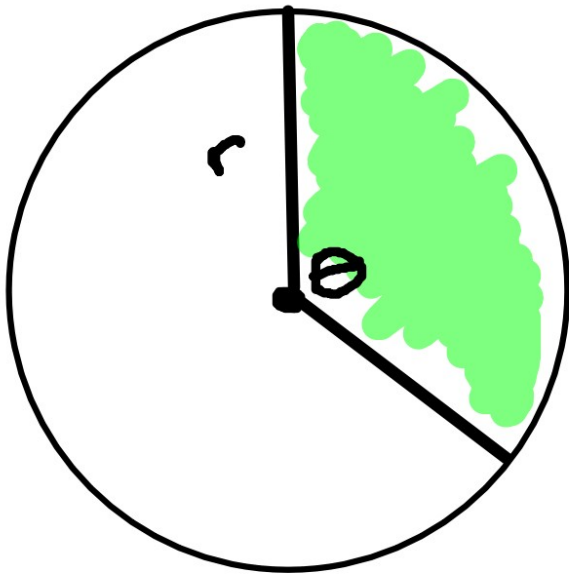
$$d = 10 \text{ m} \quad \rightarrow \quad r = 5 \text{ m}$$

$$S = (5 \text{ m.}) \left(\frac{\pi}{2} \right) = \frac{5\pi}{2} \text{ m.}$$

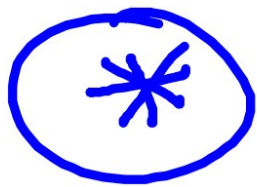
$$\text{Circle} \rightarrow 2\pi \left(\frac{1}{4} \right) \rightarrow \frac{2\pi}{4} \rightarrow \frac{\pi}{2}$$

Area of a Circle = πr^2

$$A = \pi r^2 \left(\frac{\theta}{2\pi} \right)$$



$$A = \frac{1}{2} r^2 \theta$$



$$A = \frac{1}{2} r^2 \theta$$

$$d = 12$$
$$r = 6$$

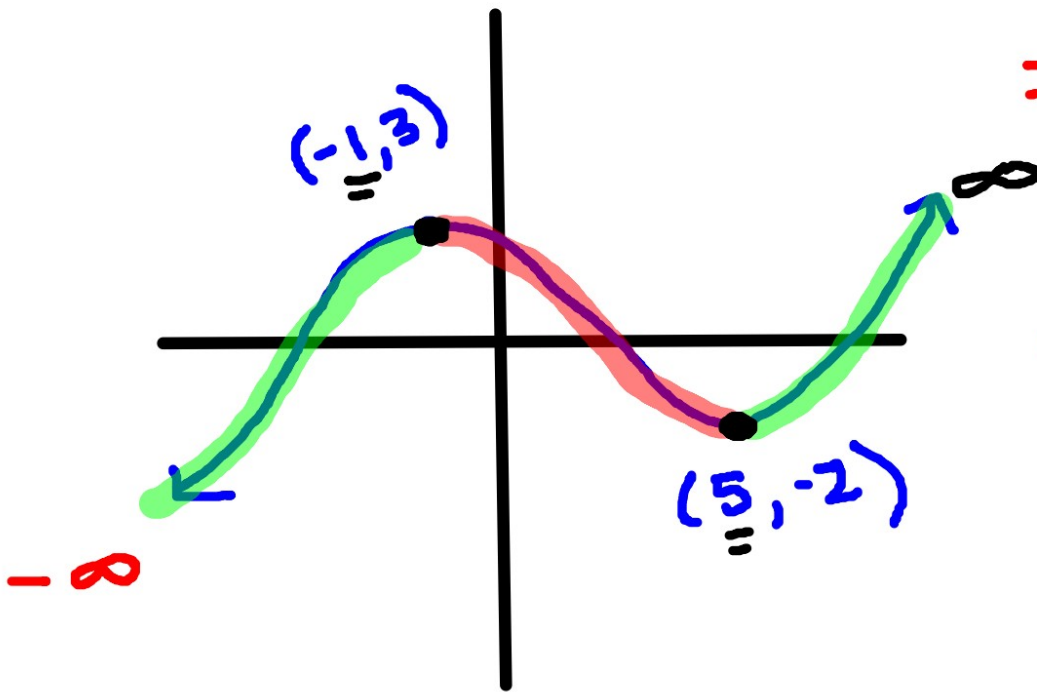
$$= \frac{1}{2} (6^2) \left(\frac{2\pi}{5} \right)$$

$$= \frac{1}{2} (36) \left(\frac{2\pi}{5} \right)$$

$$= 18 \left(\frac{2\pi}{5} \right)$$

$$A = \frac{36\pi}{5} \text{ in}^2$$

$$\theta = \frac{2\pi}{5}$$



Intervals (,) of Inc/Dec.

INC:

$(-\infty, -1)$

$(5, \infty)$

DEC:

$(-1, 5)$