RADIAN MEASURE

Convert degrees to radians:

$$R = D \cdot \frac{\pi}{180}$$

Convert radians to degrees:

$$D = R \cdot \frac{180}{\pi}$$

ARC MEASURE

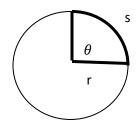
ARC LENGTH

is measured in radians or degrees.

Measure of an arc = measure of its central angle

is measured in cm, inches, etc.

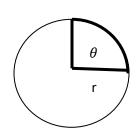
$$s = r\theta$$
 where θ is measured in **radians**



AREA OF A SECTOR

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

where θ is measured in **radians**



ANGULAR SPEED

$$\omega = \frac{\theta}{t}$$

where θ is measured in **radians**

LINEAR SPEED

 $v = r\omega$

where ω is angular speed