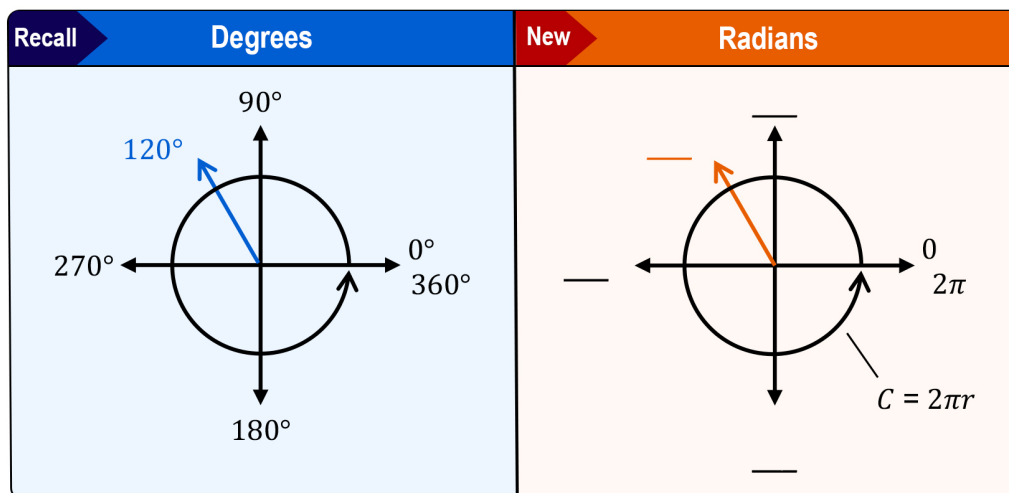# TOPIC: RADIANS

Converting between Degrees & Radians

◆ **Radians**: A different unit for measuring angles, based on a circle's circumference. Full circle = 360° = ____ radians

Recall	Degrees	New	Radians

$$\theta_{rad} = \frac{\quad\quad}{\quad\quad} \cdot \theta_{deg}$$
(degrees to radians)

$$\theta_{deg} = \frac{\quad\quad}{\quad\quad} \cdot \theta_{rad}$$
(radians to degrees)

EXAMPLE   Convert the angle from degrees to radians or from radians to degrees.

(A)

$\quad 120°$

(B)

$\quad\quad \dfrac{6\pi}{5}$

TOPIC: RADIANS

Convert the angle $540°$ from degrees to radians.

Recall

$$\theta_r = \frac{\pi}{180°} \cdot \theta_d$$

(degrees to radians)

$$\theta_d = \frac{180°}{\pi} \cdot \theta_r$$

(radians to degrees)

Convert the angle $-\frac{5\pi}{6}$ from radians to degrees.

Recall

$$\theta_r = \frac{\pi}{180°} \cdot \theta_d$$

(degrees to radians)

$$\theta_d = \frac{180°}{\pi} \cdot \theta_r$$

(radians to degrees)