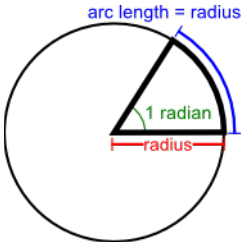
Topic	Notes	Examples
Def of radian	Radian Angle The angle formed by wrapping the radius along the circumference of a circle.	
Degree and Radians	There are 360° degrees in a circle. There are 2π radians in a circle. 360° = 2π which means… **180° = π**	
Conversion Factors	$\frac{\pi}{180^\circ}$ *or* $\frac{180^\circ}{\pi}$ Which one depends on what you want to cancel.	
How to Deg ⇒ Rad	1) Multiply by $\frac{\pi}{180^\circ}$ to cancel the deg. 2) Simplify the fraction. Leave the π.	**Convert 45° to radians.** $45^\circ \cdot \frac{\pi}{180^\circ} = \frac{45\pi}{180} = \frac{\pi}{4}$ **Convert -240° to radians.** $-240^\circ \cdot \frac{\pi}{180^\circ} = -\frac{240\pi}{180} = \frac{4\pi}{3}$
How to Rad ⇒ Deg	1) Multiply by $\frac{180^\circ}{\pi}$ to cancel the rad. 2) Simplify the fraction. Usually the π cancels, but not always.	**Convert $\frac{-7\pi}{6}$ to degrees.** $\frac{-7\pi}{6} \cdot \frac{180^\circ}{\pi} = -7(30) = -210^\circ$ **Convert $\frac{3\pi}{5}$ to degrees.** $\frac{3\pi}{5} \cdot \frac{180^\circ}{\pi} = 3(36) = 108^\circ$
Standard Position of an Angle	The initial side is on the x-axis. Rotate the terminal side counter-clockwise for positive angles. Rotate the terminal side clockwise for negative angles.