Unit Circle and Trigonometric Functions

Today's Standard

HSF.TF.A2 - Explain how the unit circle in the coordinate plane enables the extension of trigonometric functions to all real numbers, interpreted as radian measures of angles traversed counterclockwise around the unit circle.

Cues	Notes
Unit Circle	The unit circle helps extend trigonometric functions to all real numbers.
Radians	Angles can be measured in both degrees and radians.
Trigonometric Functions	Trigonometric functions include sine, cosine, and tangent.
Angle Measurement	Angles can be traversed counterclockwise around the unit circle.
Periodic Phenomena	Real-world applications include sound waves, circular motion, and signal processing.

Summary

Understanding the unit circle and its role in extending trigonometric functions to all real numbers is essential for solving complex trigonometric problems and applying these concepts to real-world scenarios.