## Unit 3: Graphs of the Trigonometric Functions

## CANYOU:

- Accurately draw one cycle of each parent function and one for each of reciprocal function:
- Sine function?

Graphing Packet: 6A and 6B

- Cosine function?

Graphing Packet: 6A and 6B

- Tangent function?

Graphing Packet: 8A and 8B

- Given a trigonometric graph or equation:
- Find the values of the Maximum and Minimum?

Graphing Packet: 3A-3B, 7A-7B

- Determine the equation of the center line?

Graphing Packet: 2A-2B, 7A-7B

- Find the period?

Graphing Packet: 5A-5B, 7A-7B

- Determine the Amplitude, Frequency, Phase Shift, Vertical Shift?

Graphing Packet: 2A-7B

- Find the Domain and Range?

Graphing Packet: 2A-7B

- Find the value of the $x$-intercepts and $y$-intercept?

Graphing Packet: 4A-4B, 7A-7B

- Write an equation of the graph using a sinusoidal function:
- $y=A \sin [B(x-C)]+D$
- $y=A \cos [B(x-C)]+D$
- Explain how the value and/or sign of $A, B, C, D$ in the equation transform the parent graph?
Graphing Packet: 7A and 7B
- Write an equation of a sinusoidal graph given information about the graph?
- Given real-world data, find a sinusoidal model (equation)?
- Given the equation used in a real-world situation, answer questions about the graph or situation?
- Given a data table, write a sinusoidal equation to model the data and use it to make a prediction?
- Graph all six trig functions with transformations?

Graphing Packet: 6A-6B and 8A-1OB

