## Unit 5B Agenda - Graphing Sine \& Cosine Functions - 2023

MM4A3. Students will investigate and use the graphs of the six trigonometric functions.
a. Understand and apply the six basic trigonometric functions as functions of real numbers.
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b. Determine the characteristics of the graphs of the six basic trigonometric functions.
c. Graph transformations of trigonometric functions including changing period, amplitude, phase shift, and vertical shift.
d. Apply graphs of trigonometric functions in realistic contexts involving periodic phenomena.

| Friday November 10 | Sine Graph with Vertical \& Horizontal Dilations (amplitude, period, domain/range, even/odd) <br> Warmup - The Graph of the Sine Function <br> Notes <br> Trig Graphing - WS 1 - Part 1 - Sine Graphs |
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| Monday November 13 | Cosine Graph with Vertical \& Horizontal Dilations (amplitude, period, domain/range, even/odd) <br> Warmup - The Graph of the Cosine Function <br> Notes <br> Trig Graphing - WS 1 - Part 2 - Cosine Graphs |
| Tuesday November 14 | Review - Sine and Cosine Graphs with Vertical \& Horizontal Dilations Warmup - Graphing Sin/Cos \#1 WS Sine and Cosine with Dilations |
| Wednesday November 15 No Xblock | QUIZ - Sine \& Cosine Graphs - Dilations |
| Thursday November 16 | Sine and Cosine Graphs with Vertical \& Horizontal Translations (phase shift and vertical shift) <br> Warmup - Graphing Sin/Cos \#2 <br> Notes <br> Trig Graphing - WS 2 \#1-10 |
| Friday November 17 Xblock | Sine and Cosine Graphs <br> Warmup - Graphing Sin/Cos \#3 <br> Practice Quiz - self-graded (as a review) <br> Trig Graphing - WS 2-\#11-20 |
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| Monday November 27 | Sine and Cosine Graphs Trig Graphing WS 5 |
| Tuesday November 28 | QUIZ - Sine and Cosine Graphs |
| Wednesday <br> November 29 | Sine and Cosine Graphs with Horizontal Reflections (and how to avoid them!) <br> Warmup - Avoiding Horizontal Reflections <br> Avoiding Horizontal Reflections WS |
| Thursday November 30 | Characteristics of Sine and Cosine / More graphing Practice!!! Warmup - Graphing Sin/Cos \#4 WS Characteristics of Sine and Cosine |
| Friday December 1 | Sine and Cosine Graphs <br> Warmup - Graphing Sin/Cos \#5 <br> Trig Graphing WS 6 (Omit \#15 \& 16) |
| Monday December 4 | TEST - Graphing \& Writing Equations |

